HOSPITAL ABSTRACTS

A MONTHLY SURVEY OF WORLD LITERATURE

PREPARED BY THE DEPARTMENT OF HEALTH

AND SOCIAL SECURITY

VOLUME 19, NO. 8, ABSTRACTS 1084-1238, AUGUST 1979

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HOSPITAL ABSTRACTS

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HOSPITALS IN GENERAL

1084. AMERICAN MEDICAL RECORD ASSOCIATION. **Glossary of hospital terms.** 2nd edition. Chicago, Ill., American Medical Record Association, viii, 111pp. $5.75

This glossary covers terms used for: medical and health care institutions; hospital patients; hospital patient data; facilities and units; units of measure; obstetric and perinatal care; ambulatory medical care; statistical terms and principles; and hospital statistics, measurements and indicators. A detailed sample in-patient census display is included as an appendix, and a bibliography (pp. 101-103).

HOSPITALS IN GREAT BRITAIN

See also Abstract No. 1095

1085. CLARK-KENNEDY, A. E. **London Pride: the story of a voluntary hospital.** London, Hutchinson Benham, 1979, 254pp. £3.50

This edition of the history of the London Hospital from its foundation in 1740 to its acquisition by the state in 1948, describes the development of the hospital in relation to historical events, social change and the problems it had to face created by the growth of science and technology. A comparison can be drawn between the development of the voluntary system of hospitals and the modern National Health Service.

1086. HAYNES, R. M. and BENTHAM, C. G. **Community hospitals and rural accessibility.** Farnborough, Saxon House, 1979, vii, 200pp. £9.00

The work of the community hospital planning study team at the University of East Anglia from 1976 to 1978 explored the feasibility of implementing the DHSS community hospital policy in a rural health district, and investigated a method for assessing some of the benefits to the rural community of dispersed hospital services. The study is in six sections and considers: origins of the policy, and policy issues; hospitals and accessibility in a rural district; the feasibility and functions of rural community hospitals; the costs to patients and visitors; distance, satisfaction and trip suppression; and the implications of different community hospital locations. Five appendices are included and a bibliography (pp. 196-197).

1087. HYDE, A. **A special kind of patient care.** *Health and Social Service Journal*, London, 1979, April 20, vol. 89, no. 4638, pp. 436-437.

In the face of the increase in size of large district general hospitals, the community hospitals have been seen as providing non-specialized medical and nursing care involving out-patient, day patient and in-patient facilities. However, many general practitioners regard this type of hospital as a threat to general practitioner hospital

beds, and fear that community hospitals, with their lack of surgical, maternity and casualty departments, will turn into second-rate geriatric units. General practitioners would like to see a stronger link between themselves, the health centre, the community hospital and the district general hospital. In addition, they want to be sure that community hospitals really do serve the community and are not just peripheral units scattered over a wide urban area. The whole theory of community hospitals is likely to face many challenges in the near future.

HOSPITALS IN OTHER COUNTRIES

See also Abstract No. 1093

1088. TEN HAVE, H. Verpleeghuis kan de patiënt geen zinvol leven bieden. **[The nursing home cannot offer the patient a meaningful life.]** *Ziekenhuis*, Utrecht, 1979, March 7, vol. 9, no. 5, pp. 116-117.

The paper is a review of a book by Dr. Ten Have, medical director of the nursing home 'Zuiderhout' in Haarlem. The book is based on a two year study which includes over 200 conversations with patients and staff. Though the number of patients in nursing homes is increasing rapidly (44,000 in 1977), most feel isolated and suffer a loss of general interests. The author thinks that the way homes are organized does not meet the aims set out by the Central Council of Public Health in 1972. A nursing home can never become a substitute for a patient's home, and staff, however dedicated, can never replace a patient's family. For patients, their homes and families remain their 'world'. Equally staff have their own individual worlds and, for their own protection, cannot allow themselves to become too involved in their patients' lives. But the author rejects the present trend of encouraging such thinking. Instead he would like to see staff encouraging the growth of a close relationship between patients and their families, family visits to be permitted at all hours and the family drawn into the patient's activities and therapy. He would like to prove in a two year experiment that this would mean happier patients, less staff and perhaps a shorter stay in the home.

1089. Le nouvel Hôpital Militaire de Bruxelles. **[The new Brussels Military Hospital.]** *Hôpital Belge*, Bruxelles, 1979, Jan./Feb., vol. 22, no. 137, pp. 7-8.

The new military hospital in Brussels, to be opened at the end of the year, will have 180 beds for surgery, 180 for internal diseases, 200 for neuropsychiatry, 21 for intensive care, six for renal dialysis, 38 for infectious diseases, and 10 for burns. Attached to the hospital will be the new centre for army personnel recruitment and selection. The majority of the patients' rooms are one- or two-bedded, and each room has a lavatory, washbasin, and shower. The aim is to reduce operating costs as much as possible by the provision of a central sterilization unit, a central bed disinfection unit, tele-guided mini-transport, and computer facilities.

1090. VAN DEN BERGHE. L'hôpital militaire de Neder-Over-Heembeek. **[The military hospital of Neder-Over-Heembeek.]** *Hôpital Belge*, Bruxelles, 1979, Jan./Feb., vol. 22, no. 137, pp. 21-29.

Five particular aspects of the organization of the military hospital at Neder-Over-Heembeek are examined: (i) staffing; (ii) the administrative chart for the whole

hospital and that for the support unit (hotel function, maintenance, transport); (iii) the use of computer facilities for ordering meals and prescription; (iv) the unit for severe burn cases, which will also be used by civilians; and (v) the infectious disease unit, to which patients suspected of having rare infectious diseases (Lassa fever or Marburg disease, for example) can be conveyed directly from the nearby international airport at Zaventem. Illustrations are included of the administrative charts, the general structure of the computer services, a specimen order form for meals, a specimen 'Pharmacard', and the ground plan of the burns unit.

PLANNING, DESIGN AND CONSTRUCTION

1091. ALLEN, D. E. **Hospital planning: the development of the 1962 hospital plan: a case study in decision making.** Tunbridge Wells, Pitman Medical, 1979, v, 191pp. £10.00

This is a study of government action to get hospital building developed systematically under the 1962 Plan. The book reviews the history of hospitals in England and Wales before 1960, including, proposals for change, and considers the basis for the development of the Plan and the history of that development. Theories of decision making are analyzed and the final chapter discusses what can be learnt from this experience about rational hospital planning and decision making itself. A bibliography of 124 items is included.

1092. DE WEVER, A. De l'utilité de la continuité entre la programmation et la gestion de l'organisation médico-administrative d'une institution hospitalière. **[Of the need for continuity between the design and management of the medico-administrative organization of a hospital.]** *Hôpital Belge*, Bruxelles, 1979, Jan./Feb., vol. 22, no. 137, pp. 39-49.

The author describes the advantages of being involved in planning the organization of the new Erasmus hospital before assuming responsibility for running it when it opened. Participation in planning before the first stone was laid enabled him and his colleagues to influence the architecture, the systems of communications and internal traffic, and the recruitment of the first members of the staff. The planning of each department and relations between different units were examined beforehand by committees of potential users and trials were carried out in existing hospitals. Areas in which prior involvement was of particular value included the introduction of a single medical file for each patient, the organization of the sterilization unit, the introduction of the appointment office which operates a 24-hour service, the organization of the pharmacy, and the system of individualized patient care. Six figures and five diagrams are included.

1093. KUNITZ, S. J. and SORENSEN, A. A. **The effects of regional planning on a rural hospital: a case study.** *Social Science and Medicine*, Oxford, 1979, March, vol. 13D, no. 1, pp. 1-11.

The growth of regional health planning in the Rochester region of New York State is described; it is pointed out that much of the impetus came from cost conscious industrial leaders. The authors discuss the impact of the increasing regulatory powers

of various health planning agencies on one local community attempting to build a new hospital. The successful effort to build the new hospital has attracted new physicians to the community, which until then had been in danger of losing the few physicians who still provided care to local residents. The new physicians were necessary in order to enlarge the hospital catchment area, attract more patients and pay for the new hospital. Other important consequences for the community were related to the infusion of jobs and money that the new and enlarged hospital provided. Moreover, together with schools, availability of health care is important if growing communities are to attract new residents and become economically viable.

DETERMINING SIZE OF HOSPITAL AND BED NEEDS

1094. RIGBY, J. P. **Access to hospitals: a literature review.** (TRRL Laboratory Report 853) Crowthorne, Transport and Road Research Laboratory, 1978, [iii], 37pp.

This review collects information on the travel patterns of people going to and from hospitals, what problems are encountered and by whom. The first part of the review is a summary of data on the travel patterns and problems of all hospital users; the second part examines hospital location. The development of the Department of Health and Social Security policy on the size and distribution of hospitals is traced, and some of the factors which are likely to influence future hospital provision and the overall pattern of medical care are discussed. A list of references (pp. 18-21) is included together with four appendices which consider: trends in hospital size; modal split for the hospital journey; variations in travel by distance, area type, treatment type and social class; and location models and their limitations together with a select list of references (pp. 34-36).

HOSPITAL DESIGN

See also Abstract No. 1101

1095. SPRING, M. **Sixties panacea.** *Building*, London, 1979, March 30, vol. 136, no. 7081, pp. 54-58.

The large and flexible designs, which were the panacea for all types of hospital in the 1960s, are still the most suitable for teaching hospitals which have to offer a full programme of medical education in addition to providing sophisticated methods of diagnosis and treatment. Two approaches to the design of large teaching hospitals have developed in recent years. Both are buildings with flexible service systems. Deep-plan, relatively low buildings can be seen at two teaching hospitals at Nottingham and Leeds respectively. The interstitial floors allow a flexible distribution of services to all parts of the building. A standard grid permits individual sections to be designed separately and amended if required. The street system is another design which makes phase development possible. This system can be seen at Flinders Medical Centre, Adelaide, Australia and at Northwick Park Hospital, Harrow, Middx.

DESIGN OF INDIVIDUAL GENERAL HOSPITALS

See Abstract No. 1089

DESIGN OF SPECIAL HOSPITALS OR UNITS

1096. KLECZKOWSKI, B. M. and PIBOULEAU, R., editors. **Approaches to planning and design of health care facilities in developing areas.** Volume 3. (WHO Offset Publication No. 45) Geneva, WHO, 1979, 149pp. Sw.fr.18.—

This volume is concerned with the planning and design of certain hospital facilities. Different sections deal with in-patient areas, the out-patient department, the minimum requirement for surgery, radiology in basic care hospitals and clinics, equipping hospitals in developing countries and the use of mobile and transportable health facilities. Lists of references are included at the end of each section.

WARDS AND PATIENTS' ROOMS

1097. NEW SOUTH WALES HOSPITALS PLANNING ADVISORY CENTRE. **Ward units.** (HOSPLAN Planning and Design Note No. 1) Surrey Hills, N.S.W., New South Wales Hospitals Planning Advisory Centre, 1977, 5 vols.

This HOSPLAN Planning and Design Note is one of a series of advisory notes produced as a result of studies carried out by the Hospitals Building Research and Development Group of the New South Wales Hospitals Planning Advisory Centre. This Note considers ward units and is in five volumes covering: user requirements; room data; engineering services; equipment; and area and cost planning. A short list of selected references is included.

ENGINEERING SERVICES

INSTALLATIONS IN GENERAL

See also Abstract No. 1106

1098. BUCKLEY, R. D. **Health care engineering for burns hospitals.** *Hospital Engineering*, London, 1979, April, vol. 33, no. 3, pp. 7-15.

The first part of this paper outlines the objectives of burn units and the three stages of care (intensive, comprehensive and convalescent). It goes on to discuss the effect on design of the trend towards patient isolation in order to prevent infection. The engineering aspects of burn units are reviewed with particular reference to: single side-room accommodation; operating theatres and treatment areas; laminar air flow units; the plastic isolation bubble; the hoverbed high air loss beds; the air mattress; the Roehampton frame; the air cushion bed; the fluidized bed; and the standard bed with foam egg box mattress.

ARTIFICIAL LIGHTING

1099. CHARTERED INSTITUTION OF BUILDING SERVICES. **Lighting guide: hospitals and health care buildings.** (Publication No. 12) London, Chartered Institution of Building Services, 1979, 80pp. £7.50

This guide provides recommendations for satisfactory visual conditions, mainly for those areas which are peculiar to hospitals and to the recently introduced health care buildings. The illuminancies recommended take into account the Institution's policy on the conservation of energy. The guide is arranged in the sequence of entering and admission followed by treatment. It begins with public areas, such as entrances, reception and waiting areas, and continues with the clinical areas—ward units, operating theatres and rooms with specialized functions. There are separate sections on exterior areas, emergency lighting and equipment. Appendices cover the subjects of 'visual clarity and typical design' calculations. A select list of references (pp. 71-72) and a glossary of lighting terms (pp. 73-80) are also included.

1100. SPRI. Belysning i sjukvårdslokaler. **[Lighting in hospitals.]** (Utgåva 2) (Råd 5.14) Stockholm, Spri, 1979, 45pp.

These recommended lighting requirements are based on the assumption that floors, walls and ceilings also reflect a certain minimum portion of the incident luminous flux. Aspects considered include: light and colour; general features of lighting; design; lighting in patient rooms, hygiene rooms, operating rooms, intensive care rooms and recovery rooms; technical specifications; summary of energy conservation measures; and a table of proposed lighting. Eighteen appendices are included which show how the lighting can be located in different premises.

1101. TAYLOR, Lord. **The natural history of windows: a cautionary tale.** *British Medical Journal*, London, 1979, March 31, vol. i, pp. 870-875.

The author criticizes the construction of windowless working environments and describes how frequently they occur in modern hospital design. He favours low, flexible buildings as exemplified in the Department of Health and Social Security prototype 'nucleus' hospital, and found in many older hospitals, such as University College Hospital and old St. Thomas' Hospital. Hospitals with few windows, need to spend more on air conditioning, and recirculation of used air without adequate filtration results in the spread of infection by droplet spray. Seven simple rules for good hospitals are listed. These include: (i) all rooms to have windows; (ii) all windows to open; (iii) no air conditioning in temperate climates; (iv) no cube construction; and (v) not more than 500 beds on any one site.

TRANSPORT IN GENERAL

See Abstract Nos. 1094, 1208

VENTILATION AND AIR CONDITIONING

1102. ARNOLD, D. **Fan systems and energy.** *Hospital Engineering*, London, 1979, April, vol. 33, no. 3, pp. 20-25.

Between 25 and 30 per cent of the electrical energy used in large modern buildings is

required solely for the purposes of distributing heating and cooling energy and providing ventilation. A study of office buildings has shown that two-thirds of this energy is used by fans and whilst considerable interest has been shown in fan efficiency, scant attention has been paid to the components that comprise the fan system and determine the basic energy requirement. The object of this paper is to demonstrate an analysis that can predict the conditions under which a system will deliver and treat sufficient air throughout the lifetime of the building at the lowest total energy consumption that fulfils the performance requirements of that system.

MAINTENANCE OF BUILDINGS AND EQUIPMENT

1103. ARCARONS, J. M. Mantenimiento de los aspectos hoteleros en un hospital. **[Hospital maintenance.]** *Estudios sobre hospitales*, Barcelona, 1978, no. 91, pp. 17-40.

Whether a hospital be large or small, the problem of maintenance can be solved economically. The author examines the problems of urgent and medium-term repairs and explains the economic benefits to be derived from programmed maintenance. He describes how to establish and operate a maintenance department for a 500-bed hospital. Nine diagrams and sample work sheets are included.

SANITARY EQUIPMENT AND FITTINGS

1104. DOBSON, A. **Showers for the elderly.** *Nursing Times*, London, 1979, May 17, vol. 75, no. 20, pp. 841-842.

Showers are used successfully for geriatric patients in the West Suffolk Hospital, Bury St. Edmunds. Each patient was first shown the shower and given a demonstration of how it would be used. A rubber mat to prevent the nurses slipping is essential and the patient sits in a Sani-chair which is metal with a plastic seat and can be cleaned easily. The shower room should be warm and draught free. Having tested the water before starting showering, the patient should be asked frequently if she is comfortable. After the shower, the patient should be wheeled to the edge of the shower area, dried, dressed and kept warm. Once they become used to the shower, many patients can do some of the process themselves. Twenty out of 23 elderly female patients enjoyed the shower very much. Showers for the elderly are quick and hygienic and should be used more often. Shower facilities should be provided in community homes as showering is often physically easier for the elderly than bathing.

EQUIPMENT, FITTINGS, FURNITURE

COLOUR SCHEMES

1105. SPORTELLI, A. Il colore nell'ospedale. **[Colour in the hospital.]** *Tecnica Ospedaliera*, Milano, 1979, Jan., vol. 9, no. 1, pp. 30-33.

The author recommends that Italian hospitals should imitate the example of those

in other countries and be more daring in their use of colour for interior decoration. Bright, cheerful colours create a sense of continuity with the outside world and reduce the patient's sense of isolation. A well-chosen range of colours has a curative effect which cannot be imputed to suggestion. The author's thesis is supported by 10 colour photographs of hospital interiors, two of which, from the McMaster Health Sciences Center, Hamilton, Ontario, are particularly striking for their use of vibrant colours.

EQUIPMENT GENERALLY

See also Abstract Nos. 1160, 1205

1106. DANSK SYGEHUS INSTITUT. Sygehustypiske normer 1978. **[Hospital standards 1978.]** (Katalog 78.05) København, Dansk Sygehus Institut, 1978, 115pp. Kr.55

The aim of this catalogue is to provide a complete survey of national and international standards, codes of practice and recommendations which are typical for hospitals and the health sector in general. The national norms are collected from Denmark, Norway, Sweden, West Germany and the United Kingdom, together with certain norms from the United States, Canada, and other countries. The catalogue consists of four sections: a register of standard institutions; standards listed according to subject matter; standards listed according to standard institution; and a subject index of standards.

MEDICAL EQUIPMENT

See Abstract No. 1228

ELECTRONIC EQUIPMENT

See Abstract No. 1207

STAFF GENERALLY

STAFF COMPLEMENTS

See Abstract Nos. 1112, 1116, 1117, 1123, 1204

RECRUITMENT AND MANPOWER

See also Abstract No. 1124

1107. MICK, S. S. **Understanding the persistence of human resource problems in health.** *Milbank Memorial Fund Quarterly/Health and Society*, New York, 1978, vol. 56, no. 4, pp. 463-499.

Four themes appear repeatedly in studies of health manpower: (i) there is a shortage

of health personnel, particularly physicians; (ii) available staff are poorly distributed according to specialty and geography; (iii) too few health personnel are trained in the precepts of preventive medicine or primary care; and (iv) not enough advantage is taken of the possibilities of increasing the productivity of skilled staff by using allied health personnel. Nearly all proposals for meeting these problems have been concerned with changes in education. An assessment is made of efforts at change through educational solutions. It is concluded that these have had little success because the health sector of society displays a resistance to change—not in numbers but in the relationships among groups within it. The health care system possesses a reservoir of wide flexibility on two counts, productivity and substitution, but its rigid stratification is a major barrier to its fulfilment. Three possible sources of change exist: (i) the growth, both absolutely and relatively, of mid- and lower-level health staff implies a major shift in power; (ii) the increasing role of the federal government; and (iii) current and projected increases in physicians. A list of 108 references to the literature is included.

STAFF TRAINING

See also Abstract Nos. 1118, 1119, 1122, 1175, 1177

1108. McCAMPBELL, J. F. **Basic cost analysis can improve in-service education.** *Hospitals*, Chicago, 1979, Jan. 16, vol. 53, no. 2, pp. 121-124, 126, 128-129.

Analysis of basic cost data regarding staff of the in-service education department of the Little Company of Mary Hospital, Evergreen Park, Ill., revealed an unnecessarily wide range of costs per student hour. Profiles of two staff were prepared, one with a low cost per student hour and the other with a high cost. This led to a change in the director's conception of the ideal educator, and the reorganization of the department. This paper describes the analytical process in detail. The new structure has a two-level staff organization. At the first level are 11 part-time educators who fulfill the basic function of teaching the care programmes and fit the low-cost profile. At the second level are the six educators who have responsibility for specific functions; there are as few as possible because they are expensive. These six posts are: management staff training; secretary, co-ordination, record keeping; audit, performance analysis, course development; costing, performance analysis, management training; research available programmes, institutional co-operation, media; and media.

STAFF WELFARE

See Abstract No. 1194

SPECIAL CLASSES OF STAFF

MEDICAL STAFF

1109. PETERSON, M. J. **The medical profession in mid-Victorian London.** Berkeley and London, University of California Press, 1978, x, 406pp.

The changing nature of medical careers in the period from 1858 to 1886 in mid-

Victorian England is traced and the social and educational backgrounds of physicians analyzed. The six chapters consider: the early 19th century medical world; medical education; careers in general practice; formation of a professional elite; the struggle for status and income; and medical entrepreneurship. The study reveals how recently the medical profession came to have the autonomy and authority it now enjoys and the methods by which that power was obtained. A series of appendices and notes are included together with four bibliographies on: official documents; other manuscript and printed primary sources; secondary literature—medical profession, medicine and sciences; and selected secondary literature.

1110. BLOOM, B. S. and PETERSON, O. L. **Physician manpower expansionism: a policy review.** *Annals of Internal Medicine*, Philadelphia, 1979, Feb., vol. 90, no. 2, pp. 249-256.

A lack of national health goals in the United States has allowed physician manpower policy to be dominated by an expansionist philosophy. Scarce resources have been channelled into the production of specialist physicians trained to provide complex and expensive care for uncommon diseases, using other scarce and expensive resources and adding to the steep rise in medical care costs. Society seems to want access to primary care, and simultaneously fears increasing costs of care. Lack of access plus high costs might lead to rash implementation of other inappropriate policies. Success of policy decisions is pure serendipity if made without reliable and relevant information or based on inappropriate data, such as opinions alone. If information is unavailable, then physician manpower decisions should be delayed or, if made, implemented cautiously.

1111. STEVENS, R., GOODMAN, L. W. and MICK, S. S. **The alien doctors: foreign medical graduates in American hospitals.** New York and Chichester, Wiley, 1978, xvi, 365pp. £13.75

In the decade 1965-1974 75,000 foreign physicians entered the United States intending to stay for at least a temporary period of work. By the academic year 1973-1974, when this study was undertaken, foreign medical graduates composed one-fifth of physicians in the United States and one-third of physicians in graduate training as interns or residents. The authors examined the assertion that the presence of foreign medical graduates in the United States constitutes a problem or crisis. Aspects considered include: the decision and background to migration; recruitment and expectations; patterns of entry to the U.S. Health Care system; mobility; house staff responsibilities; educational experience; life in the United States; the decision to remain or to return; and policy interpretations. Two appendices present the methodology and a survey of medical graduates.

1112. PARKHOUSE, J. **Medical manpower in Britain.** Edinburgh and London, Churchill Livingstone, 1979, vii, 144pp. £3.00

This book considers medical manpower forecasting and planning in Britain. The findings and predictions of the various commissions and reports published in recent years are summarized and their accuracy and consequences investigated. The author

makes his own predictions and suggests alternative solutions to various problems, based on his own investigations and research. The nine chapters consider: (i) the background; (ii) the career structure; (iii) manpower developments in relation to predictions and recommendations; (iv) the current situation; (v) women doctors; (vi) choice of career; (vii) immigration and emigration; (viii) developments in the future; and (ix) analysis of the effectiveness of the health service.

NURSING STAFF

See also Abstract Nos. 1156, 1167, 1194

1113. PEMBREY, S. **Standards in nursing.** *Nursing Times*, London, 1979, May 17, vol. 75, no. 20, pp. 814-815.

Despite the current unease about nursing standards, the author believes that during recent years nurses have been developing measures that give clear guidance for the 1980's. Although the Salmon report produced many able nursing managers, it also tried to apply an industrial model to nursing without any proper analysis. Problems produced by Salmon stem from the acceptance of a line relationship from top management down to clinical nurses, which has lowered the value of the work clinical nurses do and the salary they receive. The responsibility for clinical standards must be the responsibility of clinical nurses. More attention needs to be paid to patients' needs and their own measures of nursing care. Three mechanisms for doing this are: (i) patient associations and community health councils which offer patients nursing standards; (ii) qualitative research by nurses; and (iii) more formal methods for organizing and monitoring a written nursing care plan for each patient. These plans could also be used as a powerful weapon for obtaining resources.

1114. BULLOUGH, V. L. and BULLOUGH, B. **The care of the sick: the emergence of modern nursing.** London, Croom Helm, 1979, [iv], 311pp. £9.95

This book consists of a historical survey of the development of nursing from early historical times to the present day. The early chapters cover nursing in primitive and medieval periods followed by chapters on nursing in the 18th and 19th century and the influence of Florence Nightingale. Later chapters include treatment of the rise of the trained nurse, changing standards in nursing, the role of government, specialization, the economies of the profession and its changing image. The final chapter is a broad survey of developments throughout the world. There are notes on the references given in each of the chapters and an extensive bibliography (pp. 270-300).

1115. VERHONICK, P. J. and SEAMAN, C. C. **Research methods for undergraduate students in nursing.** New York, Appleton-Century-Crofts, 1978, xv, 154pp. £6.55

This book outlines steps in the research process paralleling steps in the broader scientific method. The methods presented are primarily non-experimental, for nursing undergraduates and practitioners of nursing. Aspects considered include: science and research; the research problem; statement of purpose and objectives; review of the

literature; selected designs for study; methods and techniques for the collection of data; probability and sampling; analysis of data; and the written report. Seven appendices consider: instructions to observers; observation recording sheet; study code; questionnaire format; interview schedule; tabulation sheet for record review; and the weekly schedule for the observer.

1116. HOWELL, L. C. **An experiment in the use of a model for nurse manpower planning in the commissioning of a new district hospital.** Birmingham, University of Aston Management Centre, 1977, vi, 109pp.

This project attempts to achieve a synthesis of the needs of the individual member of staff with the needs of the organization for the ultimate benefit of both. It considers a systematic approach to certain manpower planning problems in the commissioning of the North Devon District Hospital. There are four sections to the report which discuss: staffing and manpower planning; the study design and procedures; the analysis techniques and description of findings; summary of objectives, methods, findings and interpretation, and conclusion. A bibliography (pp. 67-68) and 16 appendices are included.

1117. MACKLEY, B. and HESLOP, T. **The Aberdeen formula: evaluation on the larger scale [3].** *Nursing Times*, London, 1979, March 29, vol. 75, no. 13, occasional papers; pp. 37-39.

Tables showing work load have been prepared in the area of South Tyneside in the style and format of the Aberdeen report. Values of hours of basic nursing care received per patient are shown, but are not as constant as those for Aberdeen owing to the varying degrees of basic care offered. Comparisons between the two areas show that technical nursing percentages are higher in Aberdeen, as is the proportion of time spent in administrative duties. Two predictions of required staffing levels have been made for all appropriate wards in the South Tyneside-based standards of hours spent per week per patient. An Aberdeen-based prediction would provide a staffing level about 12 per cent greater than that using locally based values. Time standards are not therefore acceptable without adjustment from one area to another. No final evaluation of the Aberdeen formula can be made until a widely accepted method of measuring patient care is developed. (See also Abstract No. 1123).

1118. KIRKWOOD, L. **The clinical teacher.** *Nursing Times*, London, 1979, May 3, vol. 75, no. 18, occasional papers; pp. 49-51.

Three different questionnaires concerned with the role of the clinical teacher were sent to 99 clinical teachers, 37 tutors and 14 ward sisters employed in schools of nursing or hospitals in the London area. There was a total response rate of 63 per cent. The survey showed that there is general agreement among clinical teachers as to their responsibilities, namely; (i) teaching patient-centred nursing care; (ii) helping students to put theoretical knowledge into practice; and (iii) discussing patient care with small student groups. Sixty-six per cent also had lecturing responsibilities. Difficulties arose in carrying out (ii) because of a lack of contact with tutors and the fact that theory and practice are seldom co-ordinated. Ward sisters appeared to understand the

clinical teacher's role better than tutors, but even so, clinical teachers often found it hard to convey new ideas from the school to the wards. Many felt that their teaching time was given a low priority on the ward. The clinical teacher has served nursing education through a time of transition and the future of the role now needs clarification.

1119. JONGENEEL, F. Stages in het ziekenhuis: overvolle loopplank tussen onderwijs en werkveld. **[Service in the hospital: the lack of balance in career structure between training and field of activity.]** *Ziekenhuis*, Utrecht, 1979, March 7, vol. 9, no. 5, pp. 110-114.

A study group of experts in nursing and health education discussed the demand for practical training periods in hospitals for students from outside training schools. Based on figures from a study in 1973 it was found that these periods varied from one to 104 weeks and that the increasing demand was largely due to expansion and specialization in various fields. Tensions were created, particularly when time was demanded from staff in already short staffed hospitals. Agreements on training were unsatisfactory and problems arose on choice of instruction, organization of training periods, and finance. A series of recommendations were made: (i) for training schools: the elimination of differences in programmes of similar types of schools, better regional distribution, reduction in length of courses by introduction of simulation methods, video tape, improvement of balance between theoretical and practical aims; (ii) for hospitals: better training of tutors, centralized organization, distribution of vacancies by annual planning; (iii) for the authorities: the creation of more posts, the setting of educational standards, the integration and expansion of courses, agreements and contracts. The appointment of a general co-ordinator was suggested. The paper includes a table of numbers of students in 10 categories of nursing and health education and a list of references.

1120. BROWN, J. D., BROWN, M. I. and JONES, F. **Evaluation of a nurse practitioner-staffed preventive medicine program in a fee-for-service multispecialty clinic.** *Preventive Medicine*, New York, 1979, Jan., vol. 8, no. 1, pp. 55-64.

In the summer of 1975, Carle Clinic, a multi-specialty clinic in Urbana, Ill., developed a preventive medicine clinic in an effort to meet a growing demand for services for well patients, including those worried about their health. The clinic was staffed by three nurse practitioners working under the supervision of the physicians in the internal medicine department. Patient satisfaction with the service was evaluated by a questionnaire sent to 492 patients randomly selected from those choosing voluntarily to be examined by physicians or nurse practitioners. It was found that although both groups of health professionals received favourable patient evaluations, the nurse practitioners received significantly more favourable evaluations than physicians on eight items of a 12-item patient satisfaction scale. Patients seen by nurse practitioners had significantly less waiting time and more new health problems detected than those seen by physicians. No differences occurred between the groups concerning patient compliance, existing health problems undetected, confidence in the examination, and cost of the examination.

1121. ROYAL COLLEGE OF NURSING. **Implementing the nursing process: guidance for the preparation of nurses who will be involved in implementing the nursing process.** London, Royal College of Nursing, 1979, [ii], 15pp. £0.50

This guide to the nursing process considers methods by which nurses can move

towards planning more individualized care and evaluating the care which has been given. Two appendices are included which present selected abstracts on the nursing process (pp. 4-9) and a selective bibliography (pp. 10-13). A list of members on the Rcn advisory panel on the nursing process is also included.

1122. MARSON, S. N. **Nursing, a helping relationship?** *Nursing Times*, London, 1979, March 29, vol. 75, no. 13, pp. 541-544.

The importance of communication skills in nursing has been stressed recently, but little systematic training has been carried out. One suitable method for training in interpersonal and interpsychic skills is role play, where learners have a chance to examine their feelings about a particular problem or person. Role play exercises involve a leader who sets up the situation and the method is most effective when it arises spontaneously out of a group discussion. The case study method is a learning experience based on the solving of a typical problem and improves the student's ability to plan a course of action. Where access to audio-visual material is available, micro-teaching may be used to teach skills such as counselling and interviewing. To be effective in interpersonal relationships the student must be emotionally secure. Exercises to promote learning by experience and discussions of emotional issues can help nurses cope with situations such as care of the dying.

1123. MACKLEY, B., HESLOP, T. and MCALLISTER, D. **The Aberdeen formula: evaluation on the larger scale [2].** *Nursing Times*, London, 1979, March 22, vol. 75, no. 12, occasional papers; pp. 33-36.

Comparative studies have shown that standards of nursing care given to all categories of patients in South Tyneside at least match the acceptable standard prescribed by the Aberdeen formula. However, proportionately less time was spent on basic nursing tasks in South Tyneside compared with Aberdeen in the main medical specialties. Time spent on technical nursing and domestic activities was almost the same in both areas, but more time was spent on administration in South Tyneside. In assessing duties appropriate to each nursing grade, the two areas agreed in 73 per cent of all assessments made. There was a broad level of agreement in classifying patients into dependency groups. In general, the nursing time required per patient increased the higher the dependency, but in Aberdeen certain geriatric patients received more attention than in South Tyneside, owing to a current emphasis on mobility. Thus, factors influencing nursing time, and thereby the levels of staffing, are directly related to the pattern of care prevailing in the area concerned. (See also Abstract No. 1117).

ANCILLARY STAFF

1124. WILLIAMS, A. and others. **Factors associated with labour turnover among ancillary staff in two London hospitals.** *Journal of Occupational Psychology*, Letchworth, 1979, March, vol. 52, no. 1, pp. 1-16.

Three interrelated groups of factors influence staff turnover: economic, organizational and personal. This paper explores the generality of certain previous findings. It examines the relevance of selected variables affecting turnover rates of ancillary staff in two large inner London hospitals and the complex relationship between turnover and absenteeism.

The reported studies are based on data derived from staff records and an attitude survey. In general the findings corroborate relationships found in other organizational settings; possible methodological weaknesses are identified to account for certain discrepancies. The negative relationship between turnover and absenteeism reinforces conclusions reached in some recent reviews. The need is emphasized for more carefully designed research to examine the interrelationships between staff turnover, absenteeism and job satisfaction.

ORGANIZATION AND ADMINISTRATION

See also Abstract Nos. 1090, 1092, 1093, 1135, 1143, 1206, 1218

1125. HEPNER, J. O., editor. **Health planning for emerging multihospital systems.** (Case Studies in Health Administration—volume one) St. Louis, C. V. Mosby, 1978, xvii, 369pp. £12.55

This book consists of a series of case studies in health planning for multihospital systems divided into eight parts. Part one gives a general view of multihospital systems. Parts two and three describe the response of individual institutions to the planning process. Part four covers sharing hospital services, and part five shows the response of hospitals to the health care needs of the community. Part six deals with the survival of small hospitals and part seven with merger arrangements. The final part deals with organizational problem solving in multihospital systems.

1126. HOADLEY, H. R. and KRASIK, E. R. **Management engineering unit serves two-hospital system.** *Hospitals*, Chicago, 1979, Jan. 16, vol. 53, no. 2, pp. 105-108.

The Albert Einstein Medical Center, Philadelphia, consists of two units: (i) the 619-bed Northern Division, providing tertiary care to patients throughout the city and its suburbs; and (ii) the 215-bed Samuel H. Daroff Division in the south of the city, providing primary and secondary care and health maintenance to the surrounding community. This structure forces the centre's management engineering department to concentrate an increasing amount of its time on the management effectiveness type of project activity. This creates some internal time management problems for the department and an extra post has had to be created to cope with additional requests. However, these problems are small when compared with the positive effect of management engineering on more than one institution.

1127. PIERCE, C. F. **Hospitals' future depends upon long-range planning.** *Hospitals*, Chicago, 1979, Jan. 16, vol. 53, no. 2, pp. 80-82, 84, 86.

If hospitals are to shape their own future, they must take the initiative in establishing a firm and continuous planning process. Strategic planning should take into consideration the external environment and internal responses to that environment. The New Jersey Hospital Association has developed a planning assistance programme, the activities of which can be grouped around four subjects, often overlapping: (i) policy setting for planning; (ii) dissemination of information; (iii) technical assistance; and (iv) planning co-ordination. Brief details are given of these activities.

1128. REECE, D. A., BOISSONEAU, R. and WOLTERS, E. **Division management system replaces unit management: usable in small hospitals as well as large.** *Hospital Topics*, Sarasota, 1979, Jan./Feb., vol. 57, no. 1, pp. 11-12, 14-16.

This article describes a system of division management as compared with unit management, of patient care services at the Midland Hospital Center, Midland, Michigan. The division manager, with a management training, has ultimate control over the administration of a patient care unit and provides a link between professional nurses, physicians and administration. He is immediately below the top management level in the hospital organization and by interpreting and influencing policy he can support the interests of many groups. One of the four divisions at the Midland Hospital Center is the patient care division, encompassing the surgical services departments. Under division management, staff numbers and other costs have been reduced and a day surgery scheme has been introduced. As problems arise from diversity and change rather than from size, divisional management is suitable for both large and small hospitals.

1129. ROSS, A. **Vertically linked organizations hold challenges and opportunities.** *Hospitals*, Chicago, 1979, Jan. 16, vol. 53, no. 2, pp. 67-72.

As more and more hospitals integrate their services with other health care facilities, the need to explore the challenges and opportunities associated with such arrangements grows proportionately. A vertically integrated health care organization is a group of facilities that have agreed upon a set of goals, share to some degree resources and management and serve a defined (not necessarily geographically) population. This study of such organizations places special emphasis on the internal relationships associated with such factors as structure and control, team building and developing new initiatives. Vertically integrated organizations must create structures that have enough management reserve to cope with problems which arise and still manage for the future.

1130. LEJEUNE, S. De l'utilité de la continuité dans la programmation et la gestion d'une institution hospitalière. **[On the need for continuity in the management and design of hospitals.]** *Hôpital Belge*, Bruxelles, 1979, Jan./Feb., vol. 22, no. 137, pp. 51-56.

The 900-bed Erasmus University Hospital was opened in 1977. Aspects of the design which will have a particular impact on the functioning of the hospital include: standardized ward blocks; standardized two- and four-bedded rooms; the design of the operating block, emergency department, and intensive care unit; the introduction of a closed-loop pneumatic transport system for the rapid dispatch of drugs, samples, files, etc.; the use of a cold line system for meals, with reheating by warm air in the ward unit; ventilation and air conditioning systems; and the maintenance control centre. Capital investment was extremely heavy in some of these areas but should be offset by reduced operating costs.

1131. SIBLEY, H. **Industrywide management plan can affect quality, cost of care.** *Hospitals*, Chicago, 1979, Jan. 16, vol. 53, no. 2, pp. 73-76.

This paper describes an industry-wide management approach to two problems in health care: the quality of care, including access to, availability of and continuity of

care; and increases in the cost and use of health care services. This approach involves the key decision-makers: physicians, hospitals, other health care organizations, Blue Cross-Blue Shield plans, business corporations, health systems agencies and government. They should participate in management of the health care system as a whole in order to ensure high quality care and to control costs. This participation can include many activities, such as education on management problems and methods, use of shared services and management improvement programmes, implementation of incentive reimbursement, and promotion of hospitals' interaction at the local level.

ECONOMICS OF HOSPITAL MANAGEMENT

See also Abstract Nos. 1185, 1207

1132. McCarthy, C. M. **New York study shows regulatory costs unreasonably high.** *Hospitals*, Chicago, 1979, Jan. 16, vol. 53, no. 2, pp. 89-90, 92, 94.

Concerned about the high and rising costs of compliance with regulations imposed by all sources, the Hospital Association of New York undertook a study to determine the precise nature of those costs. The study identified 164 agencies with jurisdiction over 109 areas of acute care operation; a good deal of duplication was revealed. Major findings were that the number of man-hours spent annually on regulatory matters would be sufficient to staff 75 250-bed hospitals and nearly a quarter of the annual costs of hospitals in New York State can be attributed to compliance with regulations. Admittedly, regulation is essential in health services, but how much regulation and how to regulate are key questions. It is recommended that all concerned with the regulatory process, regulators and regulated alike, take a new hard look at regulations. A number of specific recommendations are made.

RUNNING COSTS

1133. O'Donoghue, P. **Controlling hospital costs: the revealing case of Indiana.** Denver, Colo., Policy Center Inc., 1978, ix, 146pp. $9.75

The object of this study is to provide evidence concerning prospective rate setting and hospital cost control by examining the Indiana Program—a major prospective rate setting scheme. The study is in 11 sections and considers: the background and aim of the study; the analytical framework; the influence of the scheme on costs and the financial position; effects on productivity and resource use; impact on quality and case intensity; influence on hospital management; operating expenses; overall impact of the scheme in Indiana; and the possibility of reproducing the scheme outside Indiana. The evidence revealed by the study is discussed. A select list of references is included (pp. 144-146).

BED OCCUPANCY, ECONOMIC USE OF BEDS

See also Abstract Nos. 1200, 1219, 1225, 1234

1134. Shaughnessy, P. W. and Lutz, E. **Nurse/physician reactions to 'swing beds'.** *Hospital Medical Staff*, Chicago, 1979, March, vol. 8, no. 3, pp. 10-18.

Rural hospitals in Utah, Iowa, South Dakota and Texas have been allowed to provide long-stay care in acute care beds on an experimental basis. Termed the 'swing-bed' approach, the scheme fulfils a community need and helps small hospitals financially.

Although given introductions to the scheme, some medical, nursing and administrative staff objected on the grounds that: (i) long-stay patients need more nursing care; (ii) staff had been insufficiently educated in long-stay care; and (iii) physicians had not been involved in the early stages of the project. However, with experience, most physicians and nurses found the 'swing-bed' system acceptable. Nurses had to adjust to a different type of caring for long-stay patients, but found they did not spend any longer with them than with their acute care patients. The chronic problems of long-stay patients require a greater emphasis on discharge planning. Widespread use of the 'swing-bed' system would require; (i) adjustments in reimbursement schemes; (ii) a change to a broader spectrum of care; and (iii) the setting up of nursing home/hospital referral arrangements.

1135. BARRO, G. Degenza ospedaliera e programmazione regionale. **[Hospital length of stay and regional policies.]** *Ospedali d'Italia*, Roma, 1978, Dec., vol. 15, no. 12, pp. 32-42.

A method is presented of calculating the number of 'avoidable' days spent in hospital and the number of 'superfluous' beds in public hospitals in the region of Umbria, a small region which has no marked demographic, socio-economic, or urban/rural differences between one area and another. Data from 12 areas in the region are given in a series of six tables (number of beds, bed occupancy ratio, average length of stay in hospital, annual number of patients, annual number of bed days), and the average length of stay and the bed occupancy ratio for the whole region established. Analysis showed that 10 out of the 12 areas required fewer beds than they actually had, while two areas needed more beds. An overall reduction of 670 beds or 10 per cent of the total number of beds in the region is proposed.

1136. GRIFFITHS, D. A. T. and WAINWRIGHT, L. **A hospital information room at the Ipswich District General Hospital.** *Hospital and Health Services Review*, London, 1979, April, vol. 75, no. 4, pp. 121-126.

The information room, or operations room as it is called locally, at Ipswich District General Hospital has now been operational for about five years with 18 months of developmental operation before that. This paper describes the objectives of the information room, its location and equipment, and the range and presentation of the data included. The three basic areas covered from the beginning are: waiting lists; bed states and patient flows; and operating theatre allocation and use. Later developments are outlined. The most obvious effects of the room were on the knowledge and appreciation of management information among medical and nursing staff. Improvements in performance and costs did follow the introduction of the information room and they have been sustained. One of the most valuable lessons of the information room was the fundamental importance of visual presentation.

APPOINTMENT SYSTEMS, WAITING LISTS

See also Abstract No. 1136

1137. SPANGENBERG, F. Wacht- en behandeltijden in de polikliniek. **[Waiting and treatment time in the policlinic.]** *Ziekenhuis*, Utrecht, 1979, Jan. 10, vol. 9, no. 1, pp. 14-17.

Following two investigations into hospital waiting times, a third was carried out in

an Amsterdam hospital with a centralized appointment system. Three possible methods were considered: (a) hospital staff mark times of patients' arrival, treatment and leaving; this method provides much data at low cost but is time consuming; (b) patients fill in a questionnaire; this is a low cost method with patients' involvement, but only 20 per cent return the questionnaire; (c) independent research workers accompany the patients; this is an accurate, but labour intensive method. With the aid of medical students the third method was adopted and during two months 50 patients seeing 12 consultants were accompanied and questioned. It was found that two thirds of the patients lived locally. Administrative procedure on arrival took an average of 12 minutes. Waiting time for consultants varied from seven to 161 minutes, with an average of 35 minutes for the X-ray department. A total visit lasted on average 67 minutes of which 47 were spent waiting. More than half of the patients were well satisfied. More details are given. As a result of the study it was found that different methods of research produced different results. The investigation will be repeated next year. The paper includes a diagram and a table of various waiting times.

ELECTRONIC DATA PROCESSING

See also Abstract Nos. 1140-1142, 1175, 1182, 1187, 1188, 1215, 1226

1138. Krankenhaus-Rechnungswesen und EDV. **[Hospital accounting and electronic data processing.]** *Veska*, Aarau, 1979, vol. 43, no. 2, pp. 63-80.

This is a series of five papers on various aspects of the use of electronic data processing in hospitals. The titles are as follows: (i) a system for calculating diagnostic and therapeutic performance in medicine, by W. Frischknecht; (ii) a VESKA study tour in the United States with particular reference to electronic data processing in hospitals, by E. Hügli; (iii) cost accounting as an instrument of information and management, by H. Allenspach; (iv) determining hospital costs; and (v) electronic data processing in the health services, by E. Senn.

LIBRARIES AND INFORMATION SERVICES

See Abstract No. 1136

ORGANIZATION AND METHODS, WORK STUDY

See also Abstract No. 1178

1139. De verdere gang van zaken met het FWG-systeem. **[Further progress with the health service work evaluation system.]** *Ziekenhuis*, Utrecht, 1979, Jan. 10, vol. 9, no. 1, pp. 9-12.

The last of a series of six reports on evaluations of functions in the health services has been brought out. The aim is to introduce a new structure of remuneration. The report will be discussed with employee organizations and presented to the National Hospital Council for consideration and implementation. Evaluation will be worked out on a point system, details of which have still to be agreed. The main lines to be considered will be: (a) implementation of the system for each institution and date of introduction; and (b) grouping and salaries within the collective labour agreement. Any evaluation decision should be open to appeal by both employers and employees.

The timetable proposed by the National Hospital Council, starting March 1979, suggests introduction of the new structure by January 1982. Some 700 health service institutions with approximately 185,000 employees are involved and approximately 45,000 descriptions and gradings have to be worked out. This will require a minimum of two function analysts plus a leader for each institution. Their training should be a basic eight day course in function analysis and a four day course in project leading. Costs will include salaries of the project workers, the costs of the courses and changes in salaries of hospital staff due to the introduction of the project.

MEDICAL RECORDS

See also Abstract No. 1136

1140. CHANG, E. **The use of distributed data bases for medical information systems.** *Methods of Information in Medicine*, Stuttgart, 1979, April, vol. 18, no. 2, pp. 71-74.

The important characteristics of medical data are: (i) many autonomous sources; (ii) high geographical locality of reference; (iii) high degree of idiosyncrasy in terms of users' preceived information structures and needs; (iv) actual processing requirements are simple; and (v) very strict demands for reliability, security and confidentiality. These characteristics favour the use of a network of small computers with limited computing power and moderate storage capacities, interconnected so that data sharing is possible. Essential pre-conditions for such a system are: a universal identification system; a standard nomenclature; user confidence; political will; and sound cost-benefit analysis. Its advantages are: greater parallel activity; increased security; more flexible information structures for users; and higher efficiency. However, the feasibility of such systems is currently limited by problems related to social priorities and political will, rather than to technology.

1141. SMITH, M. E. and NEWCOMBE, H. B. **Accuracies of computer versus manual linkages of routine health records.** *Methods of Information in Medicine*, Stuttgart, 1979, April, vol. 18, no. 2, pp. 89-97.

In a larger study, more than 320,000 records of ill health (including death) in British Columbia were linked by a CDC 6600 computer to a file of about one million British Columbia birth records. Present in the ill-health files were records of 44,781 events for which similar birth linkages had also been sought clerically at an earlier time. This study is concerned with those ill-health records for which double linkage was attempted. The comparison shows that the success rate for the computer operation was higher (98.3 versus 96.7 per cent) and the proportion of false linkages very much lower (0.1 versus 2.3 per cent). The rate at which the ill-health records were processed by the computer was approximately 14,000 per minute of central processor time, representing a cost of half a cent apiece.

1142. TEN HOOPEN, A. J. Medische registratie, terminologie en doelen. **[Medical registration, terminology and goals.]** *Tijdschrift voor Sociale Geneeskunde*, Amstelveen, 1979, Feb. 7, vol. 57, no. 3, pp. 69-73.

Problems of terminology and language used in the registration and communication of medical records are discussed on three levels. The first is the technical level. Messages are sent from their sources via a channel to their destination where they are decoded

and read. Technical problems, such as faulty signals or reception, noise interference, etc. can occur, but are fairly simple to deal with. The second is the semantic level. Problems arise through mixed use of natural language and medical terminology, the presence of synonyms and homonyms, and ambiguities due to structure of sentences. A 'formal' language should be developed, which is precise and non-ambiguous. A 'meta' language is suggested which means a selection of symbols and conceptions with a standard terminology and grammatical rules on composition of medical records. The third is the 'effect' or 'goal' level. This concerns the meaning of words and concepts in connection with goals such as planning, information, control, research and organization. More discussion is called for. The paper includes many examples, three tables, a diagram and a list of references.

HOSPITAL STATISTICS

See Abstract Nos. 1163, 1218

FINANCE AND ACCOUNTING

FINANCE

See Abstract Nos. 1179, 1180

COSTS

See Abstract Nos. 1108, 1132, 1207

HOSPITAL ACCOUNTING

See Abstract Nos. 1138, 1186

SUPPLIES AND STORES

PURCHASING

1143. Corsi, I. L'acquisto delle specialità medicinali negli enti ospedalieri. **[The purchase of medical supplies in hospitals.]** *Tecnica & Metodologia Economale*, Firenze, 1978, Nov./Dec., vol. 17, no. 6, pp. 358-360.

The author recommends that a national hospital drug handbook be prepared for Italy, which would give the generic name of each drug and the international name where one exists. Drugs would be listed by category and alphabetically, and as much information as possible provided on side-effects, route of administration etc. Drugs for hospital use should be chosen on the basis of pharmacological and clinical knowledge, and the risk/benefit ratio for certain types of drug should be assessed. Drugs which can be checked by reproducible methods for quality and quantity should preferably be chosen and simple substances preferred to combinations of drugs. Italian hospitals are entitled to a 50 per cent discount from suppliers; they can also specify the type of packaging and the mode of payment. The author offers a list of points to be considered when a contract between hospital and supplier is being worked out.

CATERING, DIETETICS, KITCHENS

DIETETICS IN THE HOSPITAL

1144. SPRI. Kostplanering med Prandium inom sjukvården. Del 2. **[Meal planning in health care. Part 2.]** (Spri Råd 6.14). Stockholm, Spri, 1979, 28pp.

The Prandium system for nutrient classification and specification has been described in a previous report (see *Hospital Abstracts* vol. 19, Abstract 834). This second part shows how the system can be applied. Information can be computer-processed with this system and it is intended to ensure the patient receives proper nutrition whilst allowing an efficient production process. Examples of the system in operation are given.

LAUNDRIES AND LINEN SERVICE

LAUNDRIES

See also Abstract No. 1164

1145. NARDI, T. Maggior produzione e minori costi i vantaggi di una lavanderia centralizzata. **[Greater production and reduced costs are the advantages of a centralized laundry.]** *Tecnica & Metodologia Economale*, Firenze, 1978, Nov./Dec., vol. 17, no. 6, pp. 342-344.

In a previous article, the author had explained the advantages of having one central laundry to serve several hospitals, and he now makes some additional recommendations on this topic. He believes that a central laundry should operate under rigorous industrial criteria, and have its own budget, furnishing accurate monthly accounts. He sees the central laundry as a first step towards the centralization of other basic hospital services such as stores, purchasing, and standardization of linen. He points out that the choice of an appropriate detergent for the laundry is important, as the cheapest is not always the most economic.

HYGIENE IN THE HOSPITAL

HOSPITAL INFECTIONS

See also Abstract No. 1216

1146. LAZZARA, A. Vie e modalita' di diffusione dei batteri gram-negativi all'interno dell'ospedale vedute attuali sull'ospitalismo batterico (1). **[Ways and methods of the diffusion of gram-negative bacteria inside hospitals showing the current state of hospital infection.]** *Ospedale*, Torino, 1979, Feb., vol. 32, no. 2, pp. 35-45.

A review of the recent international literature (63 references) suggests that two-thirds

of hospital infections are caused by gram-negative bacteria. The main reason for hospital cross-infection is the patient's reduced immunity, but other causes are the wide and indiscriminate use of antibiotics which can increase the resistance of bacteria, and the circulation of bacterial agents in the hospital environment (air, water, dust, instruments, beds, ventilators, taps, etc.). Patients, visitors, and staff are sources of infection and the bacteria are spread by direct, semi-direct, and indirect contact. Staff can easily spread infection through their hands—it has been known to spread via a liquid soap distributor over a washbasin. Other vehicles of infection are staff uniforms, instruments (catheters in particular), and food.

1147. MARPLES, R. R. and TOWERS, A. G. **A laboratory model for the investigation of contact transfer of micro-organisms.** *Journal of Hygiene*, Cambridge, 1979, April, vol. 82, no. 2, pp. 237-248.

Contact-transfer of pathogenic organisms on the hand is an important means by which patients acquire infection in hospitals, and numerous tests have been used to evaluate the efficacy of procedures designed to interrupt spread by this route. The transfer of micro-organisms from an artificially contaminated fabric to a sterile fabric was measured in a laboratory model. The model was based on grasping a fabric-covered bottle contaminated with a strain of *Staphylococcus saprophyticus*, then grasping a sterile fabric-covered bottle and counting the organisms transferred. When the donor fabric was moist 10 per cent of the available cells passed onto the hands, but this fell to 0.05 per cent when the inoculum dried. Transfer from wet hands to the fabric amounted to 85 per cent, but in the complete model only 0.06 per cent of the available cells were transferred. The model was used to assess simple methods of de-germing the hands. Washing the hands reduced transfer by 95 per cent, while washing in 70 per cent alcohol reduced transfer by 99.99 per cent. Lesser procedures investigated included applying 0.2 ml of 80 per cent ethanol to the hands, which reduced transfer by 93 per cent.

1148. HAVERKORN, M. L. and MICHEL, M. F. **Nosocomial klebsiellas. I. Colonization of hospitalized patients.** *Journal of Hygiene*, Cambridge, 1979, April, vol. 82, no. 2, pp. 177-193.

The colonization of patients by *Klebsiella* and several other gram-negative bacteria was studied in a urological ward over a six-month period. Before and during the survey there was no evidence of an outbreak of hospital infection and multi-drug resistant strains of *Klebsiella* were not isolated. *Klebsiella* were biotyped by nine biochemical tests; 66 biotypes, spread uniformly throughout the survey period, were detected. The colonization rate of throats, hands, and faces of patients increased after admission to the ward, especially when antibiotics were used. The effect of systematic antibiotics was greater than that of urinary antibiotics especially on throat and faeces carrier rates. Carrier rates for *Klebsiella* also increased after catheterization and operation—relationships which could well be multifactorial. During the first two weeks after admission the proportion of antibiotic resistant strains of *Klebsiella* in carriers increased. The proportion of resistant strains amongst isolations from clinical infections was always greater than among strains isolated routinely from sites of carriage.

1149. HAVERKORN, M. L. and MICHEL, M. F. **Nosocomial klebsiellas. II. Transfer in a hospital ward.** *Journal of Hygiene*, Cambridge, 1979, April, vol. 82, no. 2, pp. 195-205.

During a six-month period an epidemiological survey of the carriage of *Klebsiella* was conducted in a urological ward where no outbreak of hospital infection occurred. In this endemic situation the regular sampling of several sites on patients, nursing staff and the environment, and the biotyping of *Klebsiella* made it possible to analyze the pattern of transmission between sites. There was abundant evidence of transmission of *Klebsiella* between the throat, hands and faces of patients. Transmission between patients seemed to be mainly through hands. The role of nurses' hands in transmission was not evident from this survey, probably due to the relatively long interval (a week) between samplings. Through the hands of patients, wash stands and the surrounding floor were contaminated with *Klebsiella*. The biotyping of *Klebsiella* facilitated the epidemiological analysis of the results.

1150. RAMPHAL, R. and KLUGE, R. M. *Acinetobacter calcoaceticus* **variety *anitratus*: an increasing nosocomial problem.** *American Journal of the Medical Sciences*, Thorofare, N.J., 1979, Jan./Feb., vol. 277, no. 1, pp. 57-66.

During a 16-month period, 15 patients with blood isolates of *Acinetobacter calcoaceticus* variety *anitratus* were observed in the West Virginia University Medical Center, Morgantown. Thirteen of these patients acquired the organism from the hospital environment. Eleven of these represented real disease, and concurrent growth of the organism from another site was predictive of infection. A review of laboratory records showed that there was a threefold increase in non-blood isolates of this organism from hospital patients in 1975 and 1976, as compared to 1972, and a marked seasonal effect was noted, with increased isolations in summer. Aminoglycoside resistance had increased considerably with 25 per cent of non-blood isolates being resistant to gentamicin and 16 per cent resistant to tobramycin, despite its restriction; blood isolates were uniformly susceptible to gentamicin and tobramycin.

1151. TAYLOR, M. R. H. and others. **Simple and effective measures for control of enteric cross-infection in a children's hospital.** *Lancet*, London, 1979, April 21, vol. i, pp. 865-867.

There were several outbreaks of enteric cross-infection in the National Children's Hospital, Dublin during 1972. Investigations following the final outbreak in December 1972 revealed that techniques used for preparing milk feeds were unsatisfactory and items in the milk kitchen and ward cubicles were found to be heavily contaminated by gram-negative bacilli. As a result, the value of adequate hand-washing was stressed, more patient cubicles were provided and all cubicles were disinfected after use. Equipment in the milk kitchen was improved or replaced and a revised admission and discharge policy was introduced, stating among other things, that: (i) all children admitted were to be screened as out-patients; (ii) children under six months must be nursed only in cubicles; and (iii) a senior medical staff member should be placed in charge of infection control. After the changes the infection rate fell from 61 cases in 1972 to zero in 1977 and two in 1978, despite a 67 per cent increase in the number of admissions.

1152. CROSSLEY, K. and others. **An outbreak of infections caused by strains of *Staphylococcus aureus* resistant to methicillin and aminoglycosides. 1. Clinical studies.** *Journal of Infectious Diseases*, Chicago, 1979, March, vol. 139, no. 3, pp. 273-279.

In a 22-month period, strains of *Staphylococcus aureus* resistant to methicillin and multiple aminoglycosides (designated MARS) were recovered from 108 patients with hospital infections at St. Paul-Ramsey Hospital, Minn.; 66 of these were in a burn unit and 42 in other wards. Among the patients with burns, MARS were recovered from the burn wounds of 64 per cent; 32 per cent of the patients with burns had MARS bacteraemia. The patients without burns were age-matched with patients with hospital infections caused by strains of *S. aureus* susceptible to antibiotics. Patients from whom MARS were isolated had a longer mean hospital stay, developed infection later, and had received antibiotic therapy before infection more often. Types of infection and incidence of death and bacteraemia were similar in the two groups. It is concluded that antibiotic-resistant strains of *S. aureus* may cause serious infection and significant mortality.

1153. CROSSLEY, K., LANDESMAN, B. and ZASKE, D. **An outbreak of infections caused by strains of *Staphylococcus aureus* resistant to methicillin and aminoglycosides. 2. Epidemiologic studies.** *Journal of Infectious Diseases*, Chicago, 1979, March, vol. 139, no. 3, pp. 280-287.

Studies to determine the epidemiological behaviour of strains of *Staphylococcus aureus* resistant to methicillin and aminoglycosides (MARS) were conducted over a 2½ year period at St. Paul-Ramsey Hospital, Minn. Of the 201 patients from whom MARS were isolated, 156 were in the burn unit. In that unit MARS were recovered from the air, from the hair and hands of staff, and from inanimate objects. Nasal and rectal colonization were common among burned patients with infected or colonized wounds but occurred in only 6 of 74 burn unit staff. When compared with two control periods, the prophylactic use of antistaphylococcal agents in patients with burns increased markedly at the time the outbreak began. Of the 45 patients without burns from whom MARS were isolated, 42 were surgical patients. MARS were not demonstrated in the air or environment of patients with infected surgical wounds. None of 334 non-burn unit staff were found to be carriers of MARS. A determinant of antibiotic resistance was probably transmitted among strains of *S. aureus*.

SOURCES OF INFECTION

See also Abstract Nos. 1147, 1157, 1161

1154. CASEWELL, M. W. **Nasogastric feeds as a source of *Klebsiella* infection for intensive care patients.** *Research and Clinical Forums*, Tunbridge Wells, 1979, vol. 1, no. 1, pp. 101-105.

Between 1969 and 1973, about 16 per cent of all patients admitted to the intensive care unit at St. Thomas' Hospital became infected or colonized with *Klebsiella*. It was therefore decided to discover whether the food given to these patients was contaminated. Specimens were obtained from nasogastric feeds, other ward food, hospital kitchens and staff and patients' faeces and tested for *Klebsiella*. Nasogastric

feeds were the most commonly contaminated food, followed by cold food such as salad and ice cream. The sources of the food *Klebsiella* were the working surfaces, dish cloths and equipment in the hospital kitchens. *Klebsiella* serotypes found in food correlated with those types found in the faeces of patients and staff. The 22 food isolates which were discovered were more prevalent in clinical specimens from intensive care patients than from patients in other wards. The bacteriological difficulties associated with storing liquid feeds makes a strong case for the use of commercially produced feeds which are ready for use on the wards.

1155. SCHEIERMANN, N., KUWERT, E. K. and DERMIETZEL, R. Zur frage der infektiosität von HBs-antigen positivem medizinischem personal. **[On the infectiousness of HBs-antigen-positive medical personnel.]** *Deutsche Medizinische Wochenschrift*, Stuttgart, 1979, March 16, vol. 104, no. 11, pp. 381-384.

An investigation, using the electron microscope, of 29 members of the staff of a large hospital in Western Germany who were positive for HBs antigen showed virus material in the blood in every case. In nine cases Dane particles (the infectious principle of hepatitis B virus) were also observed. Hospital staff positive for Dane particles could well be a risk for patients especially if the carrier status or the infectious state of the person is not known.

PREVENTION AND CONTROL

See also Abstract Nos. 1098, 1147-1151, 1154, 1217

1156. ENGLER, K. Sygeplejersken og infektionsbekaempelsen: personalemangel og overbelägning er vore värste fjender. **[Nurses and infection prevention: our worst enemies are staff shortages and pressure on hospital beds.]** *Sygeplejersken*, København, 1979, Feb. 28, no. 9, pp. 20-23.

If infection is to be prevented, nursing staff must have learnt and be capable of carrying out proper hygienic procedures. Senior nursing officers are responsible for supporting measures agreed by introduction of the necessary procedures. Administrative nursing staff must place their professional expertise at the disposal of ward sisters in the tasks of instructing junior staff. Ordinary grade nursing staff require regular information on the infection prevention programmes operating in the hospital, on hand hygiene, techniques of isolation, and notification procedures on the appearance of a dangerous infective condition. The district nurse and the health visitor must be informed when an infected patient is discharged, and a feed-back report system is also necessary. The hospital management is responsible for supplying adequate microbiological service facilities, for maintaining the standard of institutional hygiene, and for allocating responsibility. The doctor must observe and insist on the highest standards of hygiene in the ward accommodation and staff. The establishment of a hygiene nurse's post may relieve other staff of some of the burden of hygiene routines. The article is illustrated with a detailed table of hygiene activities and responsibilities, and five photographs.

1157. BEECHAM, H. J., COHEN, M. L. and PARKIN, W. E. *Salmonella typhimurium* **transmission by fibreoptic upper gastrointestinal endoscopy.** *Journal of the American Medical Association*, Chicago, 1979, March 9, vol. 241, no. 10, pp. 1013-1015.

During a four-month period, *Salmonella typhimurium* developed in seven patients

within five days of fibreoptic upper gastrointestinal endoscopy; a retrospective cohort study confirmed the association. *S. typhimurium* was cultured from the endoscopic equipment and the accessory suction equipment; it was identical to that recovered from the seven patients with salmonellosis by serotype, antimicrobial susceptibility pattern, and bacteriophage lysis pattern. *Salmonella* transmission was attributed to inadequate disinfection of the endoscope and accessory equipment between procedures. The original source of the contamination was not discovered.

1158. LILLY, H. A., LOWBURY, E. J. L. and WILKINS, M. D. **Limits to progressive reduction of resident skin bacteria by disinfection.** *Journal of Clinical Pathology*, London, 1979, April, vol. 32, no. 4, pp. 382-385.

Antiseptic preparations used repeatedly to disinfect the skin caused a reduction in yield of resident flora to a low equilibrium level beyond which further reduction did not occur. This equilibrium varied with the antiseptic preparation used. In a comparison of three preparations, the lowest equilibrium level was obtained with 95 per cent ethyl alcohol. The further reduction in yield of skin bacteria on using alcohol after repeated disinfection with an antiseptic detergent preparation ('two-phase' disinfection) was not paralleled by a further reduction when the preparations used in the two phases were reversed, the antiseptic detergent being used after repeated disinfection with ethyl alcohol. 'Two-phase' disinfection was therefore seen to be due to further reduction in skin bacteria from the low equilibrium obtained with the antiseptic detergent to the lower level obtainable by alcohol disinfection. When repeated disinfection to equilibrium with alcohol was followed by a 'second-phase' handwash with a non-antiseptic and water, there was a large increase in the yield of skin bacteria. This finding supports the view that a low equilibrium level occurs when the reduction in density of accessible bacteria through disinfection is balanced by the emergence of bacteria drawn from deeper layers of the skin.

AIR HYGIENE

1159. CHOI-LAO, A. T. H. and others. **Mercury vapor as a contaminant of hospital environment.** *Science of the Total Environment*, Amsterdam, 1979, April, vol. 11, no. 3, pp. 287-292.

Surveys for airborne mercury were conducted in two Ottawa hospitals using two different analytical methods: (i) a silver gauze adsorption cell technique providing an integrated sample; and (ii) an ultraviolet absorption spectometer designed specifically for mercury detection. Although the concentrations of mercury were below the threshold limit values, all samples analyzed showed measurable amounts of mercury to be present. Predominant sources of mercury contamination are broken thermometers and sphygmomanometers. Good housekeeping is the key to reducing mercury vapour in the hospital environment. Suitable decontamination measures are suggested.

1160. CARTER, K. B. and HALLIDAY, M. M. **A personal air sampling pump for hospital operating staff.** *Journal of Medical Engineering and Technology*, London, 1978, Nov., vol. 2, no. 6, pp. 310-312.

Commercially available personal air samplers are bulky, expensive and not entirely suitable for use in monitoring pollutants in the air of operating theatres. This paper

describes a personal air sampler which generates a lower air flow than the commercial pumps and is able to sample the operating theatre environment throughout the day. The design, construction, and operating procedure are described. It has been found to be useful and convenient in operating theatres, and the slight noise and vibration when the fan is running is not a nuisance. Its simplicity, reliability, compactness and low cost make the sampler ideal for widespread use in monitoring the clinical environment. Three diagrams and a photograph of the sampler in use are included.

PERSONAL HYGIENE OF THE PATIENT

See Abstract Nos. 1104, 1158

INSECT AND PEST CONTROL

1161. AUGER, P. and others. **Skin acariasis caused by *Dermanyssus gallinae* (de Geer): an in-hospital outbreak.** *Canadian Medical Association Journal*, Ottawa, 1979, March 17, vol. 120, no. 6, pp. 700, 703.

Between October and December 1977, 10 staff and patients of a psychiatric hospital (Pavillon St. Charles, Centre hospitalier de Lanaudière, Joliette, Quebec) presented with scabies-like skin lesions, later found to be due to infestation with *Dermanyssus gallinae*. The problem seemed to be linked to the presence of numerous pigeons on large galleries sheltered from the wind. The patients were taking their daily walks on the galleries and could have acquired the ectoparasites there. The parasites were found on the window ledges and air-conditioners where the pigeons were nesting. The necessary steps were taken to displace the pigeons; since then no new cases of this skin condition has been observed. The literature on *D. gallinae* is reviewed.

SAFETY MEASURES

ELECTRICAL ACCIDENTS

1162. CHAMBERS, J. J. and SAHA, A. K. **Electrocution during anaesthesia.** *Anaesthesia*, Oxford, 1979, Feb., vol. 34, no. 2, pp. 173-175.

Cardiac arrest due to electrocution occurred in a young obstetric patient undergoing laparotomy. The patient subsequently died despite initial resuscitation. The cause was traced to an inappropriate and faulty switch in the base of the operating table; the circuit was completed by the ECG monitor which was of the direct earth type. This case adds a new fault to those previously reported in the literature as causing electrocution during anaesthesia.

FIRES AND FIRE PREVENTION

1163. CHANDLER, S. E. **Some trends in hospital fire statistics.** (Building Research Establishment Current Paper 67/68) Borehamwood, Building Research Establishment, 1978, [i], 22pp.

This report analyzes fires in hospitals in Great Britain attended by fire brigades and

provides later statistics (1971-1974) than those available in previous papers, with some reference to earlier years. Aspects considered include: time and place of fires; trends in fires; causes of fires; size of fires; methods of tackling and extinguishing fires; casualties, rescues and escapes. Twenty-eight tables are included. The report suggests that although there has been a sharp increase in hospital fires this is due to an improved awareness of fire dangers, rather than a rapidly worsening fire situation in hospitals.

1164. ROVIRA, R. S. Posibles causas de incendio en la lavandería. **[Possible causes of fire in the laundry.]** *Estudios sobre hospitales*, Barcelona, 1978, no. 91, pp. 47-49.

The author reviews the chief causes of fire in laundries. Electricity is the main culprit because of the laundry's damp atmosphere, but machinery is also to blame. For example, rotary driers can throw off minute fibres of textile and an accumulation of these in an obscure corner may cause a fire, particularly if the driers are heated by gas. Static electricity can accumulate in clothes revolving in the washing machines: the use of anti-static washing products and the installation of brushes are recommended to counteract this. There is also a danger where oil is used for heating, because leaking oil ignites easily when it comes into contact with air. The author recommends that Spain should imitate the Canadian system of submitting laundry machinery to exhaustive safety tests before licensing it.

1165. BRYAN, J. L. and DINENNO, P. J. **Human behavior in a hospital fire.** *Fire Journal*, Boston, 1979, May, vol. 73, no. 3, pp. 82-87, 126.

A fire at St. Joseph's Hospital on 10 August 1977 was detected by the nursing staff at approximately 20.45; all 171 patients were evacuated in 16 to 19 minutes. The first part of this paper describes the fire protection procedure at the hospital and gives brief details of the fire. The second half presents an analysis of the behaviour of the staff during the emergency, based on tape-recorded interviews with staff. The main conclusions are: the adaptive behavioural response of the nursing staff resulted in a significantly reduced physical and life loss and appeared to have been influenced by the type and frequency of fire training; nursing staff seemed extremely concerned and dedicated to the welfare of their patients; and no cases of individual or group non-adaptive behaviour were observed or reported.

PLANNING FOR MASS EMERGENCIES

1166. HARGREAVES, A. and others. **Blizzard '78: dealing with disaster.** *American Journal of Nursing*, New York, 1979, Feb., vol. 79, no. 2, pp. 268-271.

This paper describes how Boston (Mass.) City Hospital coped with an uncommon kind of disaster, a blizzard which virtually immobilized the city for some seven days. The staff faced two critical problems: how to maintain institutional integrity and quality patient care; and how to assist in the health care needs of a homebound population. Among the recommendations are that urgent consideration should be given to the way neighbourhood health centres might be used to complement hospital services in an emergency.

RADIATION HAZARDS

1167. SCOTT, E. **Radiation protection for nurses.** *Nursing Times*, London, 1979, March. 15, vol. 75, no. 11, pp. 441-445.

The dose of radiation received by the nurse when administering therapeutic quantities of radioactive materials and subsequently nursing the patient may be reduced by skilled use of time and distance. Protective shielding, such as mobile lead screens at the bedside, also help to reduce the radiation level. Ideally certain areas of the ward should be specially designed and designated for patients who have had radioactive sources inserted or administered. Radioactive materials must not come into contact with the skin and spillage of liquid sources must be avoided. Monitoring procedures must be used to prevent even the smallest loss of radioactive source, and waste materials must be carefully disposed of. Staff are particularly at risk in operating theatres and patients who have received a radioactive material should leave the theatre with a radiation warning notice. All nursing staff on the ward should wear a monitoring badge and the education of staff exposed to radioactive materials is most important.

THE PATIENT

WELFARE OF THE PATIENT

See also Abstract Nos. 1088, 1120, 1202, 1220, 1235, 1238

1168. WILLSON, M. **The growth and organisation of play groups.** *Nursing Times*, London, 1979, May 3, vol. 75, no. 18, pp. 738-739.

Play groups for children in hospital have grown along with the expansion of play provision for children generally, thanks to the pioneer work of the Save the Children Fund, the National Association for the Welfare of Children in Hospital, and the Pre-School Play Groups Association. In 1976 the report of an Expert Group on Play for Children in Hospital recommended the appointment of hospital play workers in the ratio of one to every eight to 10 children. Alternatively, every hospital admitting children was advised to designate a senior member of the nursing staff to contribute to play with the help of teachers and volunteers. As a result, senior nurses can now attend a number of courses on play for children in hospital. At the Royal National Orthopaedic Hospital, Stanmore, student nurses attend a series of play seminars. A full range of nursery and first school activities is also offered. Involvement in play in hospital can help a child understand his illness and feel confidence in the nurses. Conversely, play may help the nurses to assess a child's handicap and what it means to him and his family.

HOSPITAL SOCIAL WORK

See Abstract No. 1237

TRANSPORT OF PATIENTS

See Abstract No. 1208

TERMINAL CARE

1169. SAUNDERS, C. M. **The management of terminal disease.** (The Management of Malignant Disease Series 1) London, Edward Arnold, 1978, [viii], 210pp. £8.50

This book covers a subject which has expanded rapidly in the last 15 years. It discusses all aspects of the care of patients with terminal cancer and provides a summary of the management techniques as practised by radiotherapists, chemotherapists, surgeons and immunotherapists. Topics considered include: pathological, physical, and psychological aspects; relief of pain; control of other symptoms; radiotherapy in terminal care; the role of surgery in terminal care; management of patients in a hospice; terminal care in the National Health Service; the law relating to the treatment of the terminally ill; and the philosophy of terminal care. References are included after many of the chapters.

1170. PETT, D. **Grief in hospital.** *Nursing Times*, London, 1979, April 26, vol. 75, no. 17, pp. 709-712.

The author, a hospital chaplain, discusses the meaning of grief and bereavement and its several manifestations within the hospital. Grief in sickness often expresses itself as depression, caused by a sense of loss, especially among the elderly. Reminiscence among the old is a form of grief which should be encouraged. Anticipation of death among relatives of the dying sometimes eases the burden of grief, but sudden death is generally met by an expression of disbelief. Here the chaplain's department can relieve the pressures on the nurses on the ward. Viewing the body should not be discouraged if it helps the patient to accept death, and open demonstrations of grief should be wholly acceptable. Nurses may expect to meet grief among patients, for example, when a mother loses her baby; and baptism in intensive care can often be very consoling. The nurse's care of a deceased patient is a valuable controlled outlet for her grief. The care of the bereaved and of others who mourn ought to be more constructive and if nurses focus their attention on this, many anxieties connected with death may be relieved.

1171. SIMPSON, M. A. **Dying, death and grief: a critically annotated bibliography and source book of thanatology and terminal care.** New York & London, Plenum, 1979, xi, 288pp. $21.95

The fourth edition of this book lists over 750 books together with over 200 films, audio- and video-tapes and cassettes, teaching material, periodical references and resources. The 13 sections consider aspects of death; dying; death education; terminal care and counselling; loss; grief and bereavement; burials and funerals; euthanasia; suicide and medical ethics. French, Scandinavian, German and Dutch literature is also considered. A subject and author index to the material is included.

HOSPITAL CARE

See also Abstract Nos. 1121-1123, 1131, 1235

1172. FOLTA, J. R. and DECK, E. S., editors. **A sociological framework for patient care.** 2nd edition. New York and Chichester, Wiley, 1979, xvii, 510pp. £7.50

This collection of 37 articles examines the health care system of the United States and considers patient care within a sociological framework. The seven sections cover: (i) concepts of sociology in medicine; (ii) trends and social movements; (iii) the role of the professions; (iv) the influence of the family on the care of the patient; (v) social aspects of health and illness; (vi) problems confronting the ill patient; and (vii) possible solutions to the problems of health care. An annotated bibliography is included (pp. 489-500).

1173. EGDAHL, R. H. and others. **Fee-for-service health maintenance organizations.** *Journal of the American Medical Association*, Chicago, 1979, Feb. 9, vol. 241, no. 6, pp. 588-591.

The two general forms of prepaid health plans or health maintenance organizations (HMOs) are salaried group and fee-for-service. The performance record of fee-for-service HMOs is reviewed. At least three characteristics are integral to their apparent effectiveness: rigorous professional review; some risk sharing on the part of participating physicians; and capable management by an experienced administrator. Some challenges to fee-for-service HMOs are mentioned, together with new pressures for HMO development and current bias against fee-for-service practice. It is contended that the HMO is the only programme deeply involving physicians at the level of both their economic and professional interests. The goal should be the development of an effective national strategy to encourage the formation of both salaried group and fee-for-service HMOs to compete with each other and with the unstructured fee-for-service system.

1174. MCFARLANE, J. **Take aim and shoot for goal.** *Nursing Mirror*, Sutton, 1979, April 19, vol. 148, no. 16, supplement; pp. xx, xxiii, xxiv, xxvi, xxviii, xxvix.

Standards in nursing are concerned with the quality of practice and, as such, form part of a total plan for quality control and evaluation of the service given. A framework for evaluation is provided by the elements of input, process, output and feedback. Standards for training and registration for practice should be kept under constant review. Staffing levels also contribute to quality of care and need to be scientifically calculated. Several rating scales have been developed for the continual assessment of nursing performance, including the Slater nursing competencies rating scale and the Phaneuf audit. Patient outcomes are often used to evaluate nursing care, but these are poorly defined. The nursing process itself can contribute to the evaluation of care. By its use, the individual patient's problems are identified and a plan of action is decided upon which seeks to deal with these problems. Thus, precise objectives provide both continual evaluation and the possibility of evolving accepted standards of care.

DISCHARGE OF PATIENTS

See Abstract No. 1225

SPECIAL DEPARTMENTS

ANAESTHESIA

1175. KENNY, G. N. C. and SCHMULIAN, C. **Computer-assisted learning in the teaching of anaesthesia.** *Anaesthesia*, Oxford, 1979, Feb., vol. 34, no. 2, pp. 159-162.

Two groups of students receiving instruction in anaesthesia, one by computer-assisted learning and one by traditional tutorial methods, were compared. The program consisted of a simulated exercise in managing the various stages of a patient's illness. The scores obtained after computer-assisted learning were found to be significantly higher than those achieved after traditional teaching. The two groups were of similar ability, so the difference could reasonably be attributed to the more didactic presentation of the computer method. In addition, the student was required to respond actively to the question put to him; if his response was incorrect, he was given corrective feedback immediately. The system also allowed students to work at their own rate. Future developments will involve the linkage of computer-assisted learning to a number of audio-visual techniques.

1176. TOMLIN, P. J. **Health problems of anaesthetists and their families in the West Midlands.** *British Medical Journal*, London, 1979, March 24, vol. i, pp. 779-784.

A survey of all anaesthetists in the West Midlands region (10 per cent of all the anaesthetists in England and Wales) showed that one in 10 of their children had been referred to a consultant because of a congenital or non-acquired anomaly. Abortions among anaesthetists' families were also common, but more so when the mother was an anaesthetist. The anomalies were concentrated particularly in the central nervous system and musculo-skeletal system, and girls were worst affected. Girls with anomalies were particularly underweight. Other effects observed were unexpected infertility, cancer both in the adults and in the children, and, possibly, impaired intellectual development in the children. Many anaesthetizing areas were inadequately ventilated, and scavenging devices despite their inefficiency are recommended as a stopgap measure.

PHARMACY

See also Abstract No. 1143

1177. FRIESEN, W. T. **Clinical pharmacy education in a 3-year Australian Bachelor of Pharmacy programme.** *Journal of Clinical Pharmacy*, Oxford, 1979, March, vol. 4, no. 1, pp. 19-24.

The establishment of a clinical pharmacy education programme in the University of Tasmania is described. The concepts of clinical education and the objectives of the clinical pharmacy residency are detailed. The programme forms part of the final year of the three-year course. The first term consists of lectures and laboratory classes to prepare students for clinical rounds which begin in the second term. For 14 weeks, two days a week are set aside for rotation through clinical departments. Four weeks are also set aside to allow each student to rotate through four week-long full-time activities, two weeks in a community pharmacy, one week in a large state psychiatric hospital and one week in an acute general hospital.

1178. DiPiro, J. T., Gousse, G. C. and Kubica, A. J. **Work sampling to evaluate staff pharmacist productivity.** *American Journal of Hospital Pharmacy*, Washington, D.C., 1979, Feb., vol. 36, no. 2, pp. 201-205.

Over a 2½-month period, pharmacists' activities in the 398-bed New Haven Unit of the Yale-New Haven Hospital were observed, using a work-sampling technique, by pharmacy students employed as pharmacy technicians. During the seven daily two-hour observation periods, observations were taken and categorized every 10 minutes. A total of 7,322 observations were made. Percentages of total time used in observed activities were: (i) dispensing activities requiring professional judgment, 19.5; (ii) dispensing activities not requiring professional judgment, 37.8; (iii) therapy-related activities, 6.5; (iv) idle time, 13.2; (v) absent, 8.9; (vi) communication and co-ordination, 9.4; and (vii) out-patient activities, 0.5. The frequency of underproductive activity was significantly greater and the frequency of absenteeism and combined unproductive activity was significantly less when one pharmacist, instead of two or three, was on duty. Pharmacists were most likely to be idle from 0700 to 0900 and 1300 to 1700; most frequently absent from 1100 to 1300; and most unproductive from 0100 to 0900 and 1500 to 1700. The study showed that pharmacists' time was not used optimally, since a substantial portion was spent in unproductive and underproductive activity. Change to a daily instead of a twice daily trolley exchange and reassignment of work activities were suggested to improve use of pharmacists' time.

1179. Hayes, T. I. **Variable budgeting in the pharmacy.** *Hospitals*, Chicago, 1979, Jan. 16, vol. 53, no. 2, pp. 119-120.

A major problem in budgeting for hospital pharmacies has been the rising cost of drugs. In addition, it is the only department where the cost of supplies, that is drugs, exceeds that of staff. The number of patient days can, therefore, have a great impact on the budget figure for the cost of drugs. Other budget variables include new services, types of patients admitted, and use of emergency department. Budgeting can be improved by using a variable budgeting technique that takes into consideration the fluctuations in hospital occupancy throughout the year. This paper outlines a variable budgeting technique based on the consumer price index and the administrator's estimate of patient days.

1180. **Charging for hospital pharmaceutical services.** *American Journal of Hospital Pharmacy*, Washington, D.C., 1979, March, vol. 36, no. 3, pp. 355-359, 360-363, 363-365, 365-367, 368-370.

Five papers describe the methods of charging for pharmaceutical services in five hospitals of varying sizes in the United States. The first method makes separate charges for drug product costs, fees per day for drug distribution, dispensing fees for drugs given intravenously, and fees for special clinical services connected with drugs. The reasons for using this system and its implementation within a particular hospital are discussed. The second paper describes a method of determining charges using a computerized pricing and inventory control system which produces a fair bill for the payee. The third paper reviews a daily average combined charge for product and service calculated from itemized charges for a series of patients. The fourth paper describes a cost-saving system involving a flat fee per drug dose based on the patient's

drug administration record. The final article describes the annual costs of operating a pharmacokinetics service, from which the fee per blood sample analyzed for aminoglycoside content was calculated.

1181. LEVY, M., LIPSHITZ, M. and ELIAKIM, M. **Hospital admissions due to adverse drug reactions.** *American Journal of the Medical Sciences*, Thorofare, N.J., 1979, Jan./Feb., vol. 277, no. 1, pp. 49-56.

Of 2,499 patients admitted to a general medical ward at Hadassah University Hospital, Jerusalem, in the years 1969 to 1976, 103 (4.1 per cent) were admitted because of an adverse drug reaction. Of 60 drugs involved, the most common were cardiac, antibiotic and antineoplastic agents. The main reactions included skin rashes, bone marrow depression, arrythmia, bleeding and heart failure. Five (4.9 per cent) of the patients died and 11 (10.7 per cent) had life-threatening reactions. Risk factors predisposing to admissions due to adverse drug reactions were female sex, decreased renal function, polypragmasia and the underlying disease. It is considered that 27 per cent of the admissions could have been avoided by more careful choice and dosage of drug.

1182. TATRO, D. S., MOORE, T. N. and COHEN, S. N. **Computer-based system for adverse drug reaction detection and prevention.** *American Journal of Hospital Pharmacy*, Washington, D.C., 1979, Feb., vol. 36, no. 2, pp. 198-201.

A pilot project at Stanford (Calif.) University Medical Center for monitoring adverse drug reactions in in-patients is reported. It is an extension of a computer system originally designed to monitor patients for drug-drug interactions. The system uses a Digital Equipment Corporation PDP-11 computer programmed in MUMPS (Massachusetts General Hospital Utility Multi-programming System). Primary references from the literature are analyzed and evaluated, before being included in the data base. The patient's adverse reaction history, obtained by nurses during a patient interview, is entered into the computer by pharmacy staff through two cathode-ray tube terminals. The computer screens new prescriptions for potential adverse reactions, reports of which are sent to the patient's physician. Other special programs used in the patient monitoring system include medication profiles, drug-to-drug interaction screening, and prescription discontinuation date entry. The computer system makes it possible to detect possible adverse reactions and notify the patient's physician prior to administration of the prescribed drug.

1183. JORDAN, C. and FARQUHAR, J. **A ward stock exchange cart system.** *Canadian Journal of Hospital Pharmacy*, Saskatoon, 1979, March/April, vol. 32, no. 2, pp. 43-44.

To meet the needs arising from expansion from 297 to 425 acute care beds, Burnaby (B.C.) General Hospital has developed a weekly exchange-trolley system for ward pharmacy stock to replace the previous system under which ward stock was ordered three times weekly and supplied to the wards by means of a dumb-waiter. The new system is based on a rotation of trolleys between the wards and the pharmacy, with four of the 20 wards having trolleys exhanged on the same day. Each floor of the nursing tower has four wards which facilitates the exchange. The trolleys and the procedures followed are described. Photographs of trolleys with the stock for a surgical ward and the operating suite are included.

1184. MURRAY, J. B. and BEARDON, P. H. G. **An assessment of laminates of plastics, cellulose and aluminium as unit dose packaging materials with aspirin tablets as a model.** *Journal of Clinical Pharmacy*, Oxford, 1978, Dec., vol. 3, no. 4, pp. 229-234.

The effects of temperature and relative humidity on laminates used for packaging unit dose forms were investigated. Aspirin tablets were used as a model and their degradation was determined by a spectrothorimetric assay. The laminates were found to be suitable for use under conditions of 25°C and 75 per cent relative humidity but unsuitable under conditions of 38°C and 90 per cent relative humidity. It is recommended that each packaging material be tested with the particular tablet or capsule before large scale packaging is begun.

LABORATORIES

1185. BENSON, E. S. and RUBIN, M., editors. **Logic and economics of clinical laboratory use: proceedings of the Conference on the logic and economics of clinical laboratory test selection and use, Cancun, Mexico, March 4-9, 1978.** New York and Oxford, Elsevier, 1978, xiv, 273pp. £22.90

The Conference considered four main topics: selection of tests and diagnostic strategy; reference values and other background data; interpretation of test results; and the effective use of the clinical laboratory. A fifth section considered overall perspectives in clinical laboratory use. Commentaries and discussions are included after each section and lists of references after each of the 18 papers.

1186. DANSK SYGEHUS INSTITUT. Laboratoriefunktionen: Klinisk kemi Kostpriskalkulation. Del 1, Hovedrapport. **[Cost price accounting in clinical laboratories: main report.]** (Projektrapport 78.02) København, Dansk Sygehus Institut, 1978, 57pp. kr.35

This report (part 1 of a series of three) deals with the problems arising from an evaluation of that part of the work undertaken by the hospitals' clinical chemical laboratory. Chapter 1 gives a brief account of a method used for describing a clinical chemical laboratory. Chapter 2 gives a short description of a method used to work out how a laboratory's total costs are shared by the various analyses. Chapter 3 indicates the possible uses of the laboratory description and the calculated unit costs. Chapter 4 presents an analysis of the information collected from four hospital laboratories and one general practice laboratory. Two further parts (issued as project reports 78.03 and 78.04) describe the procedure for implementing cost price accounting in clinical chemical laboratories and the implementation of cost price accounting in hospital laboratories and one general practice laboratory.

1187. WILLIAMS, K. N. and others. **A computer system for clinical microbiology.** *Journal of Clinical Pathology*, London, 1978, Dec., vol. 31, no. 12, pp. 1193-1201.

The computer system used in the department of clinical microbiology, St. Thomas' Hospital, London, is described. It has been in use for more than three years and is now producing some 2,300 bacteriological reports per week. The equipment in the laboratory consists of a fast visual display unit (VDU), two medium-speed typewriter terminals

and an optical math reader (OMR), which is integrally linked with its own typewriter terminal. These are all on-line to the hospital's own computer which runs in time-sharing mode. The system is operated entirely by laboratory staff without special training, and involves the use of OMR forms as worksheets, automatic validation and release of most reports, and scrutiny of reports by pathologists using the VDU. The OMR worksheet records not only the final result but also most of the tests and observations made on the samples; it is the only working document used by technicians. One specialist clinic submits its laboratory requests on an OMR form, which is subsequently used to record the results. The reports are printed and also filed in the computer to produce analyses for hospital, laboratory, and clinical management.

BLOOD TRANSFUSION DEPARTMENT

1188. BURMESTER, H. B. C. and CROW, G. S. **'On line' data handling in a routine haematology department.** *Journal of Clinical Pathology*, London, 1979, March, vol. 32, no. 3, pp. 254-260.

A 'stand-alone' minicomputer, on-line, data acquisition system uses a microprocessor as an adjunct to the main central processor to increase data transmission rates. Visual display units (VDUs) provide on-line flexibility of data input. The system acquires, on-line, the Coulter S generated parameters together with the associated patient identification data and other requested tests. Erythrocyte sedimentation rate, platelet count, and B12 and folate results are fed in at will via the VDUs. Percentage differential white cell count results and the absolute leucocyte count are calculated by the microprocessor, on-line input being facilitated by remote keyboards associated with the VDUs. Total crediting of all requests and results is available on all 'current' (unfiled) reports via the VDUs, and this facility includes the entry of film appearances using plus symbols and pre-determined comments available against a code number. This editing function is also used to enter all other results that can be made available on the computer-printed report form. The computer system also provides quality control data, immediate printout of Coulter S results outside given limits, cumulative filing for all routine and designated 'priority' results, and a daily alphabetical listing of all patients from whom specimens have been examined together with full blood count, ESR, and platelet results on specimens examined that day.

MILK BANKS

1189. BAUM, D. **Development of human milk banks.** *Midwife, Health Visitor and Community Nurse*, London, 1979, April, vol. 15, no. 4, pp. 126, 128, 131.

The increase in the use of human milk in special care baby units and the setting up of milk banks reflects the rapid growth of information on human milk and its use for low birthweight and premature infants. Some form of heat treatment of the milk is needed which secures bacteriological safety without destroying valuable proteins. Opinions differ as to the precise nature of this process and the degree of monitoring required. If the milk is delivered by infusion it must be mixed frequently to prevent major loss of milk fat within the infusion system. Each milk bank must pay attention

to details of milk collection, storage and speed of transport to the hospital and make its own decisions regarding how much bacteriological monitoring is necessary and practical. Further studies are needed on human milk banking, but general experience shows that preterm babies do well on banked milk.

RADIOTHERAPY DEPARTMENT

1190. DEELEY, T. J. **A guide to the radiotherapy and oncology department.** Bristol, John Wright, 1979, [v], 106pp. £3.75

This book provides a basic knowledge of radiotherapy by describing the work of the department, the machines employed, how patients' treatment is planned, staff employed, and the results of treatment. A short bibliography is included (pp. 99-101).

REHABILITATION

1191. WINGATE, D. L. **Rehabilitation counseling.** *Dialysis and Transplantation*, North Hollywood, 1979, March, vol. 8, no. 3, pp. 245-246, 259, 274.

This paper discusses vocational rehabilitation counselling, with special reference to patients with end-stage renal disease who form the bulk of the author's case-load. It covers: philosophy and goals; services (evaluation, training, physical restoration, and supportive services); and problems.

1192. Beroepsopleidingen voor gehandicapten: organisatiestructuur Lucasstichting biedt alle ruimte voor interne samenwerking: aantal nieuwe aanpassingen ontwikkeld. **[Industrial training for the handicapped: the organizational structure of the Lucas Institution offers every possibility for internal co-operation: a number of re-arrangements have been made.]** *Technische Gids voor Ziekenhuis en Instelling*, Amsterdam, 1979, Feb. 23, vol. 48, no. 1145, pp. 50-53.

The Lucas Institution, opened in June 1971, has a central board and management governing a number of centres. One is the industrial training centre for the handicapped. Its subjects are electrical engineering, instrument making, technical drawing and administration. The courses, for adults only, last 10 months and in co-operating with industry are directed towards industrial demand. Other centres are the Academy for Professional Rehabilitation Training, with courses for speech therapists and ergotherapists; the four-storey, 160-bed rehabilitation centre which includes accommodation for the chronically handicapped and a department preparing patients for working in the outside world; a BIOS centre, concerned with integration into the outside community and equipped with a social hall and sporting facilities, such as a swimming pool, gymnasium, and rifle range; and a centre for rehabilitation techniques, concerned with technical aid for the handicapped, which has three workshops adapting and making equipment not available from industry. Some of it is briefly described, including an automatic stand for crutches, a self-raising wheelchair, a wheelchair-accommodating van, an electrical transport aid, a wheelchair with adjustable seat. This centre works in close co-operation with other centres within the Institution, but contacts with similar centres in the country and with the industrial market are poor. The paper includes a diagram and 12 pictures.

DEPARTMENTS FOR SPECIAL THERAPY

See also Abstract Nos. 1098, 1211-1217, 1226

1193. BOOTH, P., CHEETHAM, N. and JOHNSON, H. **The Windsor clinic: the role of the alcoholism treatment unit has been reviewed recently.** *Nursing Times*, London, 1979, March 29, vol. 75, no. 13, pp. 547-551.

The Windsor Clinic is a purpose-built alcoholism treatment unit in the grounds of a large psychiatric hospital with a catchment area extending from Southport to Warrington. Treatment is on an in-patient, day, or evening out-patient basis and the selection criteria are described. In-patient treatment includes discussions, occupational therapy, and role play to help the patient adjust to a return to normal life. Out-patient and day patient schemes were introduced in 1978 and offer a less supportive form of treatment, including evening meetings, day groups and after-care for previous in-patients. A study was made of the first 100 patients referred to the unit. The average age was 40; 92 per cent had no educational qualifications, 55 per cent were unemployed and 56 per cent were referred by their general practitioner. Notes were made of the amount of alcohol consumed, the duration and cause of the problem and the success of any previous treatment. The results showed that minimal treatment was often as effective as intensive in-patient treatment, and a general success rate of 73 per cent was recorded.

INTENSIVE CARE UNITS

See also Abstract Nos. 1154, 1226

1194. HUCKABAY, L. M. D. and JAGLA, B. **Nurses' stress factors in the intensive care unit.** *Journal of Nursing Administration*, Wakefield, Mass., 1979, Feb., vol. 9, no. 2, pp. 21-26.

Stresses faced by nurses working in the intensive care unit (ICU) can be categorized as those: (i) arising from interpersonal communication problems; (ii) resulting from the nurse's need for an extensive knowledge base; (iii) present in the ICU environment; and (iv) stemming from the rigours of patient care requirements. To identify the origins of stress as perceived by ICU nurses, stressful situations in the ICU were identified and 46 ICU nurses were asked to rank order them. Situations pertaining to the physical work load, the death of a patient, and communication problems with physicians and nursing administrators were ranked as most highly stressful. Nursing educators and nursing administrators can make changes and adjustments to lessen these stress factors.

SPECIAL HOSPITALS AND UNITS

OUT-PATIENT

See also Abstract No. 1210

1195. STAMP;, P. L. **Ambulatory care systems. Volume III. Evaluation of outpatient facilities.** Lexington, Mass., Lexington Books, 1978, xviii, 252pp. £14.00

This volume forms part of a series on ambulatory care systems in the United States.

Chapters cover the following subjects: evaluation of ambulatory care; patient satisfaction; satisfaction of direct care providers; quality of medical care; medical audit; audit techniques; and application of industrial quality control systems. Two appendices discuss the procedure for storing the measurement scale for assessing levels of satisfaction of health care providers; and the medical audit technique for assessing the adequacy of a uniform data base.

1196. RAY, J. L. and HOGUE, V. J. **Referral-outreach program links community clinics and hospital.** *Hospitals*, Chicago, 1979, Jan. 16, vol. 53, no. 2, pp. 117-118.

In 1973, Mercy Hospital and Medical Center, San Diego, Calif., decided to strengthen its existing primary care services through the development of a primary care access team (PCAT). The hospital decided to achieve this objective in two ways: (i) development of a patient referral system that would allow patients to receive continuity of care from their local primary care clinics to the medical centre and back again; and (ii) implementation of educational programmes to benefit the clinics' patients and staff. Today, 18 community clinics participate in the programme, the procedures and activities of which are described.

CASUALTY AND ACCIDENT

See also Abstract Nos. 1209, 1229

1197. Organisation, fonctionnement et coût des services d'urgences en milieu hospitalier. **[Organization, working and cost of emergency medical hospital services.]** *Revue Hospitalière de France*, Paris, 1979, March, vol. 43, no. 319, pp. 277-283, 285-293, 295-303.

This is the report of a working party which studied the legal context and duties of hospital emergency departments in the Île-de-France. The departments are bound to provide care for the sick, the injured, and pregnant women, and offer continuity of service and equality of care for all users. A survey of demand in nine hospitals in the Île-de-France showed that approximately 20,000 patients visit the emergency departments every year. Between 12 and 20 per cent of these patients are brought to the hospital by SMUR (Mobile Emergency and Resuscitation Services), the police, or the fire brigade, and 48 per cent of a sample of 2,750 were genuine emergencies. The average rate of admissions from the emergency department was 34 per cent. There were considerable disparities in the facilities available and the staffing of the emergency department in the nine hospitals in the survey and proposals are made for minimum staffing levels. The specific problem of psychiatric emergencies is examined in some detail. It is estimated that a fully staffed department dealing with 20,000 patients would cost 3,500 million francs per annum.

1198. L'urgence hospitalière extra-muros. **[Extra-mural emergency care.]** *Revue Hospitalière de France*, Paris, 1979, March, vol. 43, no. 319, pp. 241-274, 276.

The report is presented of a working party on the current state and future prospects of SAMU (Emergency Medical Aid Service) and SMUR (Mobile Emergency and Resuscitation Services) in the Île-de-France. The laws and circulars which regulate the operation of these services are examined. Current activity, demand and costs are

described, and recommendations are made for the future. The main problems appear to be: the definition of the responsibilities of those involved in first aid at all levels; their relations with both public and private hospitals; the division of responsibilities between SAMU and SMUR; financing regulations; confidentiality of medical data; insurance for staff; and rules relating to priority on the road for SMUR vehicles.

1199. LEAVITT, F. **The health belief and utilization of ambulatory care services.** *Social Science & Medicine*, Oxford, 1979, Jan., vol. 13A, no. 1, pp. 105-112.

The influence of consumer attitudes and beliefs about health on out-patient visits was studied in detail in a large urban medical centre in Chicago. Those studied belonged to a pre-paid medical scheme for employees of the centre. Health beliefs concerning vulnerability to illness, seriousness of symptoms and quality of care provided were measured and evaluated against both retrospective and prospective data on the use made of the centre's facilities. The results showed that an individual patient's own view of his vulnerability to illness was the best indicator of use, followed by a belief in the benefits of preventive medicine. The results using retrospective and expected rates of use were remarkably similar.

1200. ROGHMANN, K. J. and ZASTOWNY, T. R. **Proximity as a factor in the selection of health care providers: emergency room visits compared to obstetric admissions and abortions.** *Social Science and Medicine*, Oxford, 1979, March, vol. 13D, no. 1, pp. 61-69.

Physical accessibility has long been identified as a potential barrier to health services in the United States, particularly in rural areas. In metropolitan areas, travel time is less of a barrier, but remains an important factor in the selection of a hospital, especially for emergency room visits. Use of a hospital for one service strongly increases the likelihood of use of the same hospital for other unrelated services. This paper first replicates these relationships using emergency room visits, abortions and maternity admissions, and then elaborates the implications for health planning. A simple gravity model is proposed as an economical and easily updated technique for health system agencies. Based on a patient flow matrix from small neighbourhoods to the existing hospitals, models are formulated to reflect the flow patterns. They help the planners to identify underserved areas, provide hospital administrators with a method to define their service area, and make it possible to predict changes in flow patterns should existing facilities expand or restrict their capabilities.

OCCUPATIONAL HEALTH

See Abstract No. 1176

DAY HOSPITALS

See also Abstract Nos. 1203, 1221, 1224

1201. TOFANINI, P. Proposta per l'attuazione di un servizio di day-hospital. **[Proposals for the realization of a day hospital service.]** *Ospedale*, Torino, 1979, Feb., vol. 32, no. 2, pp. 56-60.

When planning a day hospital, it is essential to assess beforehand how many medical

and paramedical staff will be needed, what buildings will be required, what facilities and equipment will be needed, and what transport can be provided for patients unable to reach the hospital independently. The day hospital should be preferably at ground level and attached to the main building of the traditional hospital, but it should have its own structures and equipment. A 30-bed day hospital is considered to be adequate for an 800-bed hospital; a total of about 25 rooms will be required, and 15 of these will be used for treatment.

INFECTIOUS DISEASES AND ISOLATION

See Abstract Nos. 1155, 1216, 1217

CHILDREN

See also Abstract No. 1151

1202. LATIMER, E. **Hospitals as a part of the community and a necessary aspect of a child's education.** *Journal of Maternal and Child Health*, Richmond, 1979, April, vol. 4, no. 4, pp. 142, 144-146.

Being in hospital is a major experience for all children, whether their stay is long or short, and needs careful preparation and continuing support. Little preparation can be done for a child under two, but as children grow older they should be made aware of the hospital as a place where people are helped to get better. Following the publication of the Platt report in 1959, paediatric units gradually opened their doors to parents and families, employed more children's nurses and allowed school and play facilities. If the local hospital does not have these facilities, efforts should be made for improvement. Books for children about going to hospital should form a part of the child's regular story time. Children like to play imaginary hospital games, thereby providing valuable role playing for a possible future experience. It is important for all parents and those who work with children to help the professionals who want children to be less frightened if admission is necessary.

1203. VALMAN, H. B., LIBERMAN, M. M. and ISAACS, D. **The potential of paediatric day care.** *Health Trends*, London, 1979, May, vol. 11, no. 2, pp. 34-35.

In 1977, 2,184 children were seen in the day care unit at Northwick Park Hospital, compared with 2,155 admissions to the paediatric ward. One paediatric senior house officer, three half-time staff nurses and one part-time clerk work in the unit, which consists of a quiet area, a section for procedures and a play area. Surgical cases are few because the hospital has no paediatric surgeon, but there may be potential for an outside surgeon to visit. Staff, children and parents all find that paediatric day care has many advantages and family doctors are encouraged to refer patients to the unit. Advice on neonatal problems arising after discharge and surveillance for a short period can be provided quickly and efficiently in the unit.

GERIATRICS AND LONG-STAY

1204. HEARN, C. R. **Staffing geriatric wards: trials of a 'package'—1.** *Nursing Times*, London, 1979, April 26, vol. 75, no. 17, occasional papers; pp. 45-48.

This paper describes trials of a 'package' of geriatric nursing care developed to determine staffing requirements in geriatric wards based on patient's nursing needs. The staffing numbers and skill levels were calculated from prescriptions of care for each patient, and work measurement data were collected from geriatric wards in the West Midlands region and the North West Thames Region. The trials consisted of two-week study periods in four geriatric wards which had been staffed according to the results obtained by using the 'package'. Nurses and patients were observed in order to monitor the care given and to check the time values used in the package. Results of the trials showed a shortfall both in staffing levels and care provided compared with that prescribed by the package. This was usually caused by: (i) a failure to match staff levels with peaks in work load; (ii) the fact that the supportive and basic care is often given concurrently; and (iii) problems in identifying a minimum standard of care. Future studies need to be based on more realistic prescriptions of care.

1205. PATON, J. S. and others. **Assessment of standing aids for the physically handicapped.** *Journal of Medical Engineering and Technology*, London, 1978, Nov., vol. 2, no. 6, pp. 299-303.

Standing aids for the physically handicapped vary from simple inflatable cushions and chairs with elevating seats to fairly sophisticated tilting tables and wheelchairs. The suitability of four commercially available standing aids was assessed for routine therapy of a group of severely handicapped patients in hospital care: the Oswestry standing aid; the Godfrey standing aid, mark 1; the Valutec Levo stand-up wheelchair; and the Nomeg tilt-table. The problems which arose were mainly technical and these are considered. From experience gained during the study, the design requirements proposed for an ideal aid are: rigidity and strength; minimal physical effort required to transfer the patient; good location for feet and knees and firm support for seat, chest and back; comfort for the patient; a work table of some kind; and minimum maintenance and easy cleaning. Five photographs and two tables are included.

CANCER

See Abstract No. 1190

NEUROLOGY AND NEUROSURGERY

1206. ARBIN, M. von and others. **A stroke unit in a medical department.** *Acta Medica Scandinavica*, Stockholm, 1979, vol. 205, no. 3, pp. 231-235.

A 10-bed non-intensive stroke unit has been established in the medical department, Serafimerlasarettet, Stockholm. The aim is to make diagnostic and therapeutic studies in unselected stroke patients. Patients with suspected cerebrovascular disease in the casualty department are admitted to the unit non-selectively and without any age

limit. Relevant physical findings and laboratory data are followed and registered by code on special charts to make evaluation by computer possible. A preplanned investigative programme is adhered to and strict criteria for diagnosis and treatment are followed. The experience and results from the first 100 patients treated in the stroke unit indicate that the unit is a good basis for both education and research.

1207. THOMSON, J. L. G. **Cost-effectiveness of an EMI brain scanner: an up-dated review, 1977-78.** *Health Trends*, London, 1979, May, vol. 11, no. 2, pp. 46-48.

Following a review published two years ago, the author updates information on the cost-effectiveness of the EMI brain scanner at Frenchay Hospital, Bristol. The number of in-patients passing through the neuro-surgical unit has increased by six per cent, but the length of stay has decreased. An EMI CT1010 was installed in July 1978 and has resulted in an increase in turnover of scans of 25 per cent with 15 to 18 patients being examined in a 10-hour day. The annual expenditure for the year 1977 to 1978 was £65,770, a higher figure than previously, but as 4,500 scans were carried out, the cost per scan has remained at £15. As investigations made by a scanner do not normally require admission and replace many traditional examinations, a considerable saving on equipment and in-patient costs can be made. Thus, the EMI scanner at a regional centre more than pays for itself over a number of years.

CARDIOLOGY

1208. VETTER, M. J., POCOCK, S. and JULIAN, D. G. **Measuring the effect of a mobile coronary care unit upon the community.** *British Heart Journal*, London, 1979, April, vol. 41, no. 4, pp. 418-425.

A mobile coronary care unit working within a defined area in South Edinburgh attended 158 cases of myocardial infarction during the 14 month study period. This represented 20 per cent of patients with myocardial infarction in the area. The cases in the study group were similar in terms of age, sex and previous history of ischaemic heart disease to those which occurred in the population at large. Patients retrieved by the mobile unit had a lower overall fatality ratio, a fact which could not be explained entirely by the resuscitation or preventive treatment given by the mobile unit teams. The reasons were: (i) the mobile unit was called more quickly to those who had already arrested; and (ii) the patients at risk entered the study group for a very short time. These and other factors made it difficult to compare outcomes in the selected group and in the community. Thus, the benefits of the mobile unit were obvious in terms of the community as a whole. Both approaches need to be considered when deciding whether to establish or expand a mobile coronary care service.

1209. SILTANEN, P., SUNDBERG, S. and HYTÖNEN, I. **Impact of a mobile coronary care unit on the sudden coronary mortality in a community.** *Acta Medica Scandinavica*, Stockholm, 1979, vol. 205, no. 3, pp. 195-200.

A six-month feasibility study of a mobile coronary care unit (MCCU) in Helsinki is reported. The MCCU was manned by a nurse, medical student and driver, all of whom were volunteers and all were well trained in cardiopulmonary resuscitation. On each dispatch from the base, the MCCU collected a physician from the hospital

coronary care unit. The MCCU was provided with a portable ECG monitor and DC defibrillator, equipment for endotracheal intubation and ventilation, and a complete set of parenteral drugs and infusion fluids for cardiovascular emergency care. The MCCU was able to reach in time less than five per cent of all cases of unexpected cardiac arrest in the community. For cases of myocardial infarction and cardiac arrest transported by MCCU, a pair-matched control series was obtained from a period of two to eight months before the beginning of the MCCU activity. No difference was found in the first 28 days' mortality rate between MCCU and control groups. The MCCU did not induce any reduction of the patient delay time in the community.

RHEUMATISM

1210. HENRARD, J.-C. and COLVEZ, A. Étude d'un indicateur de santé destiné à l'évaluation de l'efficacité d'une consultation externe hospitalière. **[Study of a health indicator to assess the effectiveness of a hospital out-patient department.]** *Revue d'Épidémiologie et de Santé Publique*, Paris, 1978, vol. 26, no. 5, pp. 391-402.

The authors have devised a seven-point scale of disability (from nil to bedridden) in patients with rheumatic disorders who attend an out-patient gerontology department. They then applied it to a series of 270 patients who made a total of 480 visits to such a department in the course of one year. The notion of disability was chosen because: (i) it was independent of diagnosis and aetiology, and applicable to many diseases of unknown aetiology; (ii) it could be quantified; and (iii) it was a more comprehensive concept than that of diagnosis since it took account of ill-defined functional states and was observable by both patients and health workers, being based on repercussions on behaviour. The value of an indicator of this type in assessing the effectiveness of treatment is discussed.

UROLOGY

1211. ROSTRON, J. **Renal dialysis: an examination of alternatives.** *Clinical Trials Journal*, Sutton, 1979, vol. 16, no. 2, pp. 61-62.

The clinical and non-clinical advantages of long-term hospital and home dialysis are evaluated. An interview questionnaire survey was undertaken with 26 people: five home dialysis patients, four hospital dialysis patients, two consultants, eight general practitioners, four social workers, two housing officers and one architect. Although limited in scope, the study highlighted certain important questions. The principal disadvantages of relying more fully on hospital dialysis appeared to be: inconvenience for patients; newly allocated beds were occupied soon preventing new patients being taken on; and risk of hepatitis. While resources are restricted there is an urgent need for clinicians, administrators and even existing patients to collaborate more fully in investigating the possibilities of rationalizing the management of existing facilities with a view to treating a larger client group. Areas for investigation are suggested.

1212. TABER, S. **A long wait for a new kidney.** *Nursing Mirror*, Sutton, 1979, May 10, vol. 148, no. 19, pp. 32-33.

The author has investigated the role of a transplant co-ordinator who, as a member of a regional and dialysis unit team, could both improve the care given to terminal renal

and liver disease patients and increase the supply of cadaver organs for transplant. The co-ordinator's primary function would be to identify and develop a network of donor hospitals within the region by educating staff in the relevant departments of each hospital. All requirements for successful donor procurement must be available at all donor hospitals. The co-ordinator's role before and during donor nephrectomy would be to maintain a link with the recovery team, to assist at the nephrectomy and to ensure that all necessary procedures had been completed. After transplantation the co-ordinator must provide follow-up information for the donor hospital and keep accurate records of all donors. He or she should also educate potential transplant recipients about transplantation and after-care. A nurse of nursing officer grade would be suitable for this important post.

1213. BRYAN, F. A. and EVANS, R. W. **Dialysis where?** *Dialysis and Transplantation*, North Hollywood, 1979, March, vol. 8, no. 3, pp. 264, 266-267, 269-270, 272.

Although the costs of home dialysis are lower than those for in-hospital dialysis, its use in the United States has declined in recent years. From a study of many aspects of dialysis treatment, this paper focuses on the reasons and their relative importance for selection of dialysis site by home and hospital patients. The results demonstrate that instrumental social support in the form of a dialysis partner is a crucial concern if home dialysis is to become more prevalent than it is today.

1214. MIONE, G. and FURLAN, M. Un servizio di nefrologia in ospedale. **[A hospital renal service.]** *Ospedali d'Italia*, Roma, 1978, Dec., vol. 15, no. 12, pp. 48-72.

The organization of and facilities in the nephrology and dialysis unit in the Civil Hospital in Udine, which serves a population of 500,000 are described. The unit employs a total of 12 doctors and 44 other staff for a 24-bed dialysis section. An analysis of various social factors relating to the patients attending the dialysis unit is presented: age, distance from home to hospital, means of transport, family circumstances, occupation, length of illness, and length of dialysis, age at start of illness and age at start of dialysis. The account includes 12 tables giving details of the number of days spent in hospital, the activity of the dialysis unit between 1973-1977, the network of services available for patients on dialysis, equipment, support services, the allocation of rooms to patients with acute and chronic renal disease, and the incidence of the presence of HBsAg in the dialysis centre.

1215. CRYSTAL, R. A. and RUSSELL, J. A. G. **Information support for the national end-stage renal disease program.** *Dialysis and Transplantation*, North Hollywood, 1979, Feb., vol. 8, no. 2, pp. 149, 151, 152, 157-159, 161, 162.

The development of the End Stage Renal Disease Program of the United States Department of Health, Education and Welfare is outlined and its existing medical information system is described. It is proposed that the existing centrally located information system should be replaced by a network of independent regional processing elements. The goal of this network would be to bring excellent information to each person involved in the management of the national and regional programme activities. Since the sources of data and the primary users of that data are mostly located in the

same region, the operational and economic advantages of using the proposed local independent processing elements over that of the central information system seem clear.

1216. KANTOR, R. J. and others. **Outbreak of hepatitis B in a dialysis unit, complicated by false positive HBsAg test results.** *Dialysis and Transplantation*, North Hollywood, 1979, March, vol. 8, no. 3, pp. 232-234, 236.

An outbreak of hepatitis B occurred in a haemodialysis centre with two dialysis facilities—a new unit dialyzing 24 patients per shift and an old unit dialyzing 20 patients per shift. Investigations of the outbreak revealed two problems: (i) a positive association between hepatitis cases and dialysis in the new unit, probably due to breaks in technique; and (ii) reporting of false positive tests for HBsAg when using the RIA method. The control measures recommended are presented.

1217. POSTIC, B. and others. **Containment of hepatitis B virus infection in a hemodialysis unit.** *Journal of Infectious Diseases*, Chicago, 1978, Dec., vol. 138, no. 6, pp. 884-889.

Because of suspected exposure to a carrier of hepatitis B virus within a haemodialysis unit of the Veteran's Administration Hospital, Pittsburgh, 42 patients and 23 members of staff were given monthly routine seriologic tests for a period of three months. A patient was recognized as the carrier seven days after admission and was isolated. Immune globulin was not given to exposed people. Only one case of icteric hepatitis B occurred, in a nurse who was infected through a damaged glove while attending the carrier in isolation. No other patients or staff became infected. The limited spread of the hepatitis B indicated that the isolation of the carrier, together with the unit's routine practice of regular testing, provided adequate preventive measures in a unit normally free of hepatitis.

SURGERY

1218. CLIFF, K. S. **The use of Hospital Activity Analysis data in assessing operative procedures suitable for five-day care.** *Health and Social Service Journal*, London, 1979, April 27, vol. 89, no. 4639, pp. A29-A32.

The 1976 Hospital Activity Analysis (HAA) data for 46 pre-selected operative procedures from two health districts with populations of approximately 390,000 and 186,000 was analyzed to try to identify procedures which might be suitable for a five-day care general surgical unit. In the larger health district there was an 89 per cent comparability between those procedures found to be suitable and the pre-selected list. In the smaller health district the comparability was 82 per cent, after allowance had been made for the fact that five of the procedures were not undertaken in the health district in 1976. Using the range of operative procedures which were found to be comparable with the pre-selected list for the larger health district and applying this on an area basis using 1976 HAA data, then approximately 39 per cent of all surgical and day case admissions would have been suitable for five-day care. It is suggested that such a finding could have a considerable effect on the revenue consequences for acute services and for the provision of acute hospital beds.

1219. GRIFFITHS, M., WATERS, W. E. and ACHESON, E. D. **Variation in hospital stay after inguinal herniorrhaphy.** *British Medical Journal*, London, 1979, March 24, vol. i, pp. 787-789.

During 1970-71, 1,086 men aged 16 to 65 were admitted to eight hospitals in Wessex under nine consultants for elective repair of an inguinal hernia. The post-operative stay varied from one to 23 days, with a mean of 5.7 ±SD 2.7 days. For different consultants operating at any one hospital, the mean post-operative stays were similar, whereas for consultants who operated at more than one hospital they were significantly different. The post-operative stay was also significantly related to the size of the hospital, development of post-operative complications, time spent on the waiting list, type of repair used, bilateral herniorrhaphy, and the use of convalescent facilities. The hospital therefore appears to exercise a greater influence in determining the mean post-operative stay than does the individual consultant.

1220. BARRON, J. **Modern surgery—a personal view.** *NATNews*, Matlock, 1979, March, vol. 16, no. 3, pp. 13-16.

This paper discusses surgery with particular reference to the hopes, fears and anxieties of those who become surgical patients. The topics discussed include elective surgery, fear, emergency surgery, pain, children, surgery under general anaesthesia, premedication, surgery under local anaesthetic, the anaesthetic room, recovery, and the extent to which the patient should be told the truth.

1221. HUTCHISON, M. G. **Setting up a day surgery program.** *Dimensions in Health Service*, Ottawa, 1979, April, vol. 56, no. 4, pp. 19-21.

Mississauga Hospital, Ontario, opened a small day surgery service in the emergency department five years ago, and as a result of a growing waiting list, a day surgery unit accommodating 32 patients daily was opened in April 1978. This number is likely to increase to 40 to 50 within the next three years. Before deciding whether to develop a day surgery service, the demand for it and its feasibility within the hospital in question must be considered. Once the planning begins, a booking system must be established and a decision made as to who is responsible for the service. The day surgery population must be carefully selected and fully prepared for their day surgery visit. The advantages of day surgery include: (i) increased use of facilities for staff; (ii) reduction in costs; (iii) a decrease in waiting lists; and (iv) a shorter time away from home for the patient.

MATERNITY

See also Abstract Nos. 1189, 1200

1222. MIKLAW, H. and MIKLAW-REISSMANN, M. Familienfreundliche Geburtshilfe: Erfahrungen einer mittleren Krankenhausabteilung. **[Maternity unit with rooming-in; experience in a medium-sized hospital.]** *Fortschritte der Medizin*, München, 1979, March 15, vol. 97, no. 10, pp. 467-470.

Rooming-in in maternity hospitals has been practised in Western Germany only during recent years and very few accounts of it have yet been published. This paper reports on the system which has been in force at the Salem (Teaching) Hospital,

Heidelberg for two years. Both parents are prepared for the birth at evening information sessions and the husband is present at the birth. The possible systems for the care and feeding of the infant include care by nurses in a group ward, individual care by the mother and full rooming-in. The latter has given rise to no difficulties for mothers or complaints from them. If proper precautions are taken infection risk is not increased. There was some initial difficulty for nurses which was soon overcome. The staff workload is not increased but rooming-in is more cost-intensive. The general conclusion is that rooming-in has proved itself.

1223. Ross, T. **Midwifery in Europe.** *Nursing Mirror*, Sutton, 1979, May 10, vol. 148, no. 19, pp. 16-18; May 17, vol. 148, no. 20, pp. 16-19; May 24, vol. 148, no. 21, pp. 18-19.

This three-part paper reviews developments in midwifery in Holland, Finland and Sweden. In Holland half the babies are still born at home, but the prenatal mortality rate is among the lowest in the world. To a large extent, the answer must lie in the high ability of Dutch midwives. Procedures followed are outlined, together with the role of the maternity assistant, midwifery training, and post-natal care. Finland, too, has a low infant mortality rate. Nearly all deliveries take place in 22 large central hospitals, while antenatal care is given at maternity and child health centres. Aspects of the maternity services covered include social benefits, preparation for parenthood, and primary health care. The largest ingredient in Sweden's low infant mortality rate is probably its almost uniformly high standard of living. But Swedish parents are becoming impatient with 'conveyor-belt' births, however excellent the service, and it is expected that the Swedes will make every effort to de-institutionalize the environment of birth, without jeopardizing their fine record of physical safety in childbirth.

1224. Bonazzi del Poggetto, P. L. and others. Organizzazione di un servizio ospedaliero per l'interruzione volontaria della gravidanza presso l'ospedale policlinico S. Orsola: prime valutazioni. **[The organization of a hospital service for the voluntary interruption of pregnancy in the policlinic hospital of St. Ursula.]** *Ospedale*, Torino, 1979, Feb., vol. 32, no. 2, pp. 46-50.

This is an account of the position of the St. Ursula Hospital in Bologna during the first months after the Italian Abortion Act had come into force, in May 1978. A 'filter' out-patient department was established: (i) to speed up the bureaucratic processes; (ii) to avoid overloading the obstetric and gynaecological out-patient unit; and (iii) in the hope that co-operation with the social welfare structures in the region would thereby be made easier. In fact, half of the patients seen in the first three months came with certificates completed by the 'Family Consultants'. The volume of work was at first very considerable because few hospitals in the region had facilities for abortion. Medical and paramedical staff were chosen from among those who did not object to abortion and seconded to the unit. Day hospital treatment was used in 95 per cent of cases. The majority of the women who had abortions (64 per cent) were aged between 18 and 32 years, and 34 per cent were unmarried.

1225. Davies, D. P. and others. **When should pre-term babies be sent home from neonatal units?** *Lancet*, London, 1979, April 28, vol. i, pp. 914-915.

Twenty randomly selected infants of 33 weeks gestation and less at birth were

allowed to go home from the neonatal unit of Leicester Royal Infirmary, provided they were well, had regained their post-natal weight loss and that home conditions were satisfactory. The babies were seen at the hospital at the time of the expected date of delivery and at three months. Their weight was satisfactory and there was no increased rate of re-admission to hospital compared with 20 other pre-term infants who had been discharged at the more traditional weight of 2,200 grams. In addition, earlier discharge was more convenient for the babies' families, saved a significant amount of nursing time and caused only the minimum of extra work for the health visitors.

1226. JANIK, D. S. and others. **Computerized newborn intensive care data recording and reporting. II. An online system.** *Journal of Pediatrics*, St. Louis, 1979, Feb., vol. 94, no. 2, pp. 328-330.

A computerized system for recording and reporting data on high-risk newborn infants substantially reduced data base error and medical staff paper work time, but errors still arose through keypunching, which also accounted for 80 per cent of system operation costs. In order to overcome these problems, an on-line system was developed. An IBM 3270 remote computer terminal with visual screen, typewriter keyboard and light-pen data-entry device at Loma Linda University Medical Center newborn intensive care unit was connected by cable to the university IBM 370/158 computer. The system has been in successful operation for over one year. Operational cost at Loma Linda University is negligible; implementation cost is well within reach of most newborn intensive care units if an IBM 370 computer is available.

DENTISTRY

1227. INGLE, J. I. and BLAIR, P., editors. **International dental care delivery systems: issues in dental health policies.** Cambridge, Mass., Ballinger for W. K. Kellogg Foundation, 1978, xxi, 263pp. £10.45

The National Academy of Science's Institute of Medicine sponsored a symposium to explore various alternatives for the provision of dental care under a national prepaid system in the United States. These 22 papers represent the ideals of an international panel of experts gathered by the institute in co-operation with the Pan American Health Organization to examine world-wide approaches to dental care delivery schemes. An appendix listing the speakers, moderators and participants is included.

1228. SPRI. Dentalröntgenapparater: utförande, funktion, provning. **[Dental X-ray apparatus: requirements of construction, function and testing.]** (Rapport 3) Stockholm, Spri, 1979, 74pp.

This draft report contains a proposal for safety and functional requirements for dental X-ray apparatus. It is based upon regulations from the National Swedish Industrial Board and the National Institute of Radiation Protection. User requirements concerning application, maintenance and instructions are also included. Aspects considered include: instructions for use and service; identification marking; electrical construction; mechanical construction; and construction and characteristics of importance for radiation protection.

1229. PRICE, J. D. **An emergency dental service.** *Journal of Dentistry*, Bristol, 1979, March, vol. 7, no. 1, pp. 43-51.

An emergency dental treatment unit operates within the accident and emergency department of Birmingham General Hospital. During the academic year patients are seen by one of two final year students (with a resident dental house officer in immediate attendance if required), and during the rest of the year by a resident house officer on a rotational basis. Ancillary support is supplied by a final year dental surgery assistant trainee. The unit is open from 1700 to 0900 Monday to Saturday and from 1300 Saturday to 0900 Monday. The working of the unit and the demands made on it are reviewed. The results show that, whilst in terms of numbers the demand for such a service is reducing, the problems of the people attending are more genuine, and they are travelling further in order to obtain treatment.

PSYCHIATRY

See also Abstract No. 1193

1230. SCULL, A. T. **Museums of madness: the social organization of insanity in nineteenth-century England.** London, Allen Lane, 1979, 275pp. £8.50

This book traces the developments in the treatment of insanity in nineteenth century England, from the iron cages of Bethlem to the non-resistant policies of the reformers. The eight sections of the book consider: the rise of the asylum; the social context of reform; the chimera of the curative asylum; the role of medical men as moral entrepreneurs; the struggle of psychiatry for professional autonomy; the growth of the asylum system; the increase in numbers of madmen; and the legacy of reform. Sixteen plates are also included.

1231. EARLE, R. **'Caregivers': a study design.** *Canada's Mental Health*, Ottawa, 1979, March, vol. 27, no. 1, pp. 17-20.

The problem of planning for improved mental health services for Canadian communities has often been claimed to stem from the lack of a current, comprehensive base of information concerning the services which are currently provided. This paper presents a research design which aims to overcome this problem. It is in eight stages: (i) mental health service system description; (ii) vignette construction, each vignette being a brief statement of the presenting problems of a group of clients; (iii) caregiver information; (iv) tracking services rendered; (v) analysis and summary of services data; (vi) identification of community stakeholders (persons in the community who provide, plan or have a concern in mental health services); (vii) community stakehold opinion; and (viii) a community statement.

1232. ROSS, T. **Ely Hospital: 10 years on.** *Nursing Mirror*, Sutton, 1979, April 12, vol. 148, no. 15, pp. 16-19.

After the publication of the official report on Ely Hospital, Cardiff, was published 10 years ago, resources were made available for substantial improvements. The hospital now has 18 houses accommodating 434 patients with varying degrees of dependency. Modern treatment methods have been introduced and there is a new

rehabilitation unit. Residents are encouraged to go on holidays and outings and mix with the local community as much as they are able. The nurse-patient ratio has been improved considerably, resulting in a decrease in incontinence and aggressive behaviour. Basic care is given by nursing assistants and state enrolled nurses. The end of overcrowding has allowed a maximum of 30 per dormitory, divided into cubicles of two to six beds. Two groups of patients are preparing for life in group homes. No children are admitted now, but they receive more community support instead. A proposal to introduce a community based mental handicap service is being considered, but some doubt its feasibility and would welcome a further up-grading of the hospital.

1233. DANSK SYGEHUS INSTITUT. Planlaegning af psykiatrisk sygehusvaesen. **[Planning of psychiatric services.]** (Projektrapport 78.01) København, Dansk Sygehus Institut, 1977, 59pp. kr. 35

This report is the first by the Danish Hospital Institute which deals with the planning of psychiatric services. Chapter 1 outlines the background to the work on the report; chapter 2 sets out a series of general planning prerequisites. Chapter 3 describes several structural models; chapter 4 presents an example of setting up an organization plan for psychiatric services; and chapter 5 presents a general planning model.

1234. FREEMAN, H., CHEADLE, A. J. and KORER, J. R. **Use of hospital services by chronic schizophrenics in the community.** *British Journal of Psychiatry*, London, 1979, April, vol. 134, pp. 417-421.

A sample of chronic schizophrenic patients from an urban community, living outside hospital, were reassessed on the Present State Examination (PSE) one year after a first examination. During this time their use of psychiatric hospital services was recorded. One hundred and two patients had satisfactory interviews on both occasions. These could be divided into heavy, medium and light users of services, the numbers being eight, 14 and 63 respectively, while 17 only saw their general practitioners or had no treatment. Seventy patients showed no correlation with the use of these services; second PSE scores were not significantly different from the first; heavy and medium users of hospital services were in contact with social services to a significantly greater extent than other patients.

1235. BROOME, A. K., WEAVER, S. M. and KAT, B. J. B. **Long-term behaviour problems in psychiatric hospitals.** *Nursing Times*, London, 1979, March 22, vol. 75, no. 12, pp. 493-495.

A research project into techniques of behaviour modification was carried out among chronic psychiatric patients in a security ward. In the attempt to make long term programmes successful, the amount and quality of attention given to the individual patient is vital. Nurses need to adjust their role from one of caring to primarily one of training, obtaining a satisfactory balance between the two. The ward routine must be altered in order to develop new behaviour in the patients by giving both tangible and social reinforcers at particular times. Staff role structure may also need some adjustment. To achieve good results, behaviour programmes must be carried out over a long period of time. Ward staff must, therefore, be given realistic expectations of the work and adjustment involved and also of the likelihood of patients showing improvement.

1236. GOLDMEIER, D., HOLLANDER, D. and SHEEHAN, M. J. **Relatives and friends group in a psychiatric ward.** *British Medical Journal*, London, 1979, April 7, vol. i, pp. 932-934.

A relatives and friends group was started in a 30-bed acute ward to enable relatives of patients to meet the staff team. The visitors were invited to the day room once a week for an hour over a period of 30 weeks. Fifty relatives and friends came; 41 attended up to four meetings and nine attended five or more. The visitors chose their own topics for discussion and the staff team tried to explain certain illnesses and help with problems facing the patients and their families. An account was made of each meeting which included details of attenders, the topics raised and some of the emotions expressed by the visitors. Overall the effect of the meetings seemed productive, for they gave relatives and friends a greater understanding of the patients' illness and provided a chance to express pent-up feelings. They have now become an integral part of treatment on the hospital wards.

1237. VAUGHN, P. **The key to the growth of social work in Broadmoor.** *Health and Social Service Journal*, London, 1979, April 6, vol. 89, no. 4636, pp. 384-386.

Social work is a relatively new discipline at Broadmoor Hospital; its introduction and growth is outlined. The role of social work in the special hospitals is examined. It is contended that social work intervention with patients is influenced not only by the limitation of the institutions but also by the need to educate outside agencies about the special problems involved.

1238. TURNER-SMITH, A. and THOMSON, I. G. **Patients' opinions: a survey of the effectiveness of a psychiatric day hospital.** *Nursing Times*, London, 1979, April 19, vol. 75, no. 16, pp. 675-679.

A questionnaire was sent to all 110 patients admitted to and discharged from the psychiatric day hospital of the Cottage Hospital, Cowes, between February 1974 and September 1975. The response rate was 62.7 per cent. Eighty-nine patients felt well after discharge, 63.8 per cent preferred day hospital treatment, 87 per cent found the transport provided reliable and 83.3 per cent preferred activities carried out in informal groups. Just over one third of the patients rated the atmosphere of the unit as very good and over half rated the help they received as excellent or good. All patients had a high regard for the nurses, followed by occupational therapists and then doctors. These preferences were directly related to the amount of time each type of staff spent in the unit. The positive response to the work of the day unit was encouraging, but patients appeared to rate staff according to their availability rather than their individual skills.

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